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INEEL
IDAHO NATIONAL ENGINEERING & ENVIRONMENTAL LABORATORY

LOCKHEED MARTIN

Lockheed Martin Idaho Technologies Company
P.O. Box 1625 Idaho Falls, ID 83415

July 22, 1998

Distribution

TRANSMITTAL OF DOE/ID-10054(97) RADIOACTIVE WASTE INFORMATION FOR 1997 AND RECORD-TO-DATE – DLF-17-98

Enclosed is the *1997 Radioactive Waste Information System and Record-To-Date* annual report.

If you have any questions regarding this report, please call me at 208-526-2996.

Sincerely,

D. L. French, Advisory Engineer
Waste Generator Services

DLF:kta

Enclosure:

1997 Radioactive Waste Information System annual report

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Radioactive Waste Information for 1997 and Record-To-Date

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Radioactive Waste Information For 1997 And Record-To-Date

D.L. French
K.A. Taylor

Waste Generator Services

Published July 1998

Idaho National Engineering and Environmental Laboratory
Lockheed Martin Idaho Technologies
Idaho Falls, Idaho 83415

Prepared for the
U.S. Department of Energy
DOE Idaho Operations Office
Contract No. DE-AC07-94ID13223

ABSTRACT

This document presents detailed data, bar graphs, and pie charts on volume, radioactivity, isotopic identity, origin, and status of radioactive waste for calendar year 1997. It also summarizes the radioactive waste data records compiled from 1952 to present for the Idaho National Engineering and Environmental Laboratory (INEEL). The data presented are from the INEEL Integrated Waste Information System.

EXECUTIVE SUMMARY

This document, *Radioactive Waste Information for 1997 and Record-To-Date,* contains computerized radioactive waste data records from the Idaho National Engineering and Environmental Laboratory (INEEL). Data are compiled from information supplied by the U.S. Department of Energy (DOE) contractors. This report provides data on airborne and liquid radioactive effluents and solid radioactive waste that is stored, disposed, and sent to the INEEL for volume reduction. This report provides summarized data for the years 1952 through 1996 and detailed data for the calendar year 1997.

In 1997 the Environmental Database Integration project was initiated to bring together waste tracking systems across the INEEL into a single reporting system. Historical information from the Radioactive Waste Management Information System (RWMIS) was loaded into a data repository and starting in June 1997 shipments of containerized radioactive waste are being entered into the INEEL Interim Waste Tracking System (IIWTS).

IIWTS was developed to accurately track and report containerized waste and recyclable material and provide tracking from generation to disposal. The Environmental Database Integration project is on going to complete and implement the Integrated Waste Tracking System (IWTS). IWTS will provide inventory of waste stored, disposed, or sent for volume reduction for individual facilities across the INEEL as well as air and liquid effluents and industrial waste information. Areas with current specific facility inventory loaded into IIWTS are, Chemical Processing Plant (CPP), Test Area North (TAN), Waste Experimental Reduction Facility (WERF) and Argonne National Laboratory- West (ANL-W) and a stored total for these areas is shown on report number SS22BB01.

As part of the conversion to IIWTS, a detailed inventory of the waste stored at WERF pending treatment was performed using the facility inventory system as the baseline. The facility inventory system was implemented in 1992 and all waste containers received prior to that date were assigned the system entry date as their inventory start date. With the download to IIWTS if the original generating area could not be determined for a particular waste container, ownership was assigned to WERF beginning with the IIWTS implementation in 1997. This created the potential for double counting of waste containers. An extensive study was performed to identify duplications and correct the anomaly. In addition with the download of data from the facility system to IIWTS in 1997, no container task history was created for those containers in the WERF backlog. For containers with no task history the reporting system looks at the container date as the tracking starting point. As a result of this limitation with the data download, as older containers (containers received in the 1992 through June 1997 time period) are processed through WERF reports will look at the most recent task date and may result in some containers being reported by a date different from a previous report. As the waste backlog is worked off, this potential will disappear.

Data used in producing this annual report are from the Integrated Waste Tracking System data repository using the data download of May 1, 1998.

Airborne and liquid waste were released to the environment through engineered release points identified on Table 1 in the *Engineered Release Points* section. Monitoring and effluent sampling systems are an integral part of each engineered release point. Releases to the environment may also occur at locations other than normal release points.

In 1997, 5,327 curies of airborne radioactivity were released, of which 5,323 or 99 percent were

noble gases. In 1996 airborne activity release was 2,904 curies and in 1995 it was 1,380 curies.

After the 1996 Radioactive Waste Management Information annual report was published an error in the airborne volume release for July 1996 from Naval Reactors Facility (NRF) was noted. The correct total volume for NRF for 1996 is 3.3E+09 cubic meters (m^3).

A total of 2.336E+09 liters containing 100 curies of liquid radioactive waste was released to the INEEL environment during 1997. Ninety-nine percent of the radioactivity was tritium. The volume of radioactive liquid discharged as waste in 1997 was 5 percent more than discharged in 1996 and 24 percent more than discharged in 1995.

During 1997, a total of 1,559 m^3 of containerized radioactive waste containing 15,954 curies was shipped to the Radioactive Waste Management Complex (RWMC) for disposal. During 1996, 677 m^3 containing 14,445 curies was shipped for disposal. During 1995, 1,189 m^3 containing 25,907 curies was shipped for disposal.

The majority of the nuclides disposed in solid waste at RWMC consisted of Ni-63, H-3, Fe-55, Co-60. These nuclides accounted for 97% of the total curie activity.

The New Waste Calcining Facility (NWCF) reported that all of the high-level liquid waste has been calcined. Treatment of this particular waste stream will not resume since there is no longer any high-level liquid waste stored at the CPP and future plans do not include production of waste from this waste stream. Additional treatment of the calcined high-level waste will be conducted in the future.

The total waste treated at the NWCF through April 10, 1998, was: high-level waste, 338,511 pounds and non-high-level waste, 80,121 pounds.

As a result of the treatment completion of all liquid high-level waste, the CPP High-Level Liquid/Solid Waste Storage report (LE22FB01) has not been included in this annual. The Lockheed Martin Idaho Technologies Company, Inc. Waste Generator Services group is currently developing the system for non-containerized waste tracking. When the Environmental Database Integration project is completed and the database is in service the report LE22FB01 for non-high-level liquid waste stored and processed at NWCF will again be included in the Radioactive Waste Management Information annual report.

Notification from CPP of an error in calculating I-129 was received too late to be incorporated into the 1997 annual. The correct amount is 5.8E-02, which is up from the reported total of 2.7E-02. The correction has been entered into the database and will be correct in future printouts.

In 1997, a total of 58 m^3 with less than 1 curie activity of solid radioactive waste were sent off-site to Scientific Ecology Group (SEG) for volume reduction. In 1996, 1,279 m^3 with four curies and in 1995, 899 m^3 with four curies activity were sent to SEG for reduction.

ANL-W also completed a waste container inventory with the implementation of IIWTS. This allowed the update of report SS22NB01 and revised the storage location designation from EBR Storage to ANL-771, corresponding to the site building designation. The waste reported for ANL-771 is mixed low-level waste and mixed transuranic waste only. Mixed waste is also reported in the Idaho Hazardous Waste Generator Annual Report. Report SS22NNB01 will not appear in future Radioactive Waste Management Information annual reports, but will be reported in the Idaho Hazardous Waste Generator Annual Report.

Radioactive effluent discharges at the INEEL in 1997 met all applicable DOE requirements (DOE 5400.5, "Radiation Protection of the Public and Environment," 5820.2 "Radioactive Waste Management") and state of Idaho regulations and standards.

The impact of this waste on the environment, both onsite and offsite, is constantly monitored by

the INEEL Site Environmental Surveillance Program. The results of this program for 1997 are published in the annual report, *The Idaho National Engineering and Environmental Laboratory Site Environmental Report for Calendar Year 1997,* DOE-/ID-12082(97).

CONTENTS

ACRONYMS AND ABBREVIATIONS

A1W	Large ship reactor at Naval Reactors Facility
ANL-E	Argonne National Laboratory-East
ANL-W	Argonne National Laboratory-West
ARA	Auxiliary Reactor Area
ATR	Advanced Test Reactor
BCL	Battelle Columbus Laboratories
BEN	Bendix—Grand Junction, Colorado
BET	Bettis Atomic Power Laboratory
BNL	Brookhaven National Laboratory
B&W	Babcock & Wilcox
CEG	Combustion Engineering General Atomics
CF	Central Facilities
CG	Concentration Guide (also referred to as DCG)
CPP	Chemical Processing Plant (also referred to as ICPP)
CTF	Containment Test Facility (LOFT became CTF on 10/01/86)
CY	calendar year
D+D	decontamination and decommissioning
DCG	Derived Concentration Guide
DOE	U.S. Department of Energy
DOE-ID	U.S. Department of Energy Idaho Operations Office
EBR	ANL-W Storage Area
EBR-II	Experimental Breeder Reactor II
ECF	Expended Core Facility
ETR	Engineering Test Reactor
FAST	Fluorinel and Storage Facility
FCF	Fuel Cycle Facility
FMF	Fuel Manufacturing Facility
HFEF	Hot Fuels Examination Facility
ICPP	Idaho Chemical Processing Plant
IIWTS	INEEL Interim Waste Tracking System
ILTSF	Intermediate-Level Transuranic Storage Facility
INEEL	Idaho National Engineering and Environmental Laboratory
IWTS	Integrated Waste Tracking System
JCH	J.C. Haynes/Wright Patterson Air Force Base
LITCO	Lockheed Idaho Technologies Company
L&O	Lab and Office Building
LOF	Loss-of-Fluid Test
LOFT	Loss-of-Fluid Test
MDL	Monsanto Dayton Laboratory
MRC	Monsanto Research Corporation Mound Laboratory
MTR	Materials Test Reactor
NRF	Naval Reactors Facility
NWCF	New Waste Calcining Facility
PBF	Power Burst Facility
PER	Special Power Excursion Reactor Test (also referred to as SPERT)
PREPP	Process Reduction Experimental Pilot Plant
R&D	research and development
RESL	Radiological and Environmental Sciences Laboratory
RFO	Rocky Flats Office (Kaiser/Hill Rocky Flats, Colorado)
RLWTF	Radioactive Liquid Waste Treatment
RWDS	Radioactive Waste Disposal System
RWMC	Radioactive Waste Management Complex (also referred to as WMF)
RWMIS	Radioactive Waste Management Information System

S1W	submarine prototype at NRF
S5G	submarine prototype at NRF
SCND	Special Case Non-defense Waste
SEG	Scientific Ecology Group
SL-1	Stationary Low Power Reactor No. 1
SMC	Specific Manufacturing Capability
SPERT	Special Power Excursion Reactor Test
SPF	Sodium Process Facility
SWEPP	Stored Waste Examination Pilot Plant
TAN	Test Area North
TRA	Test Reactor Area
TSA	Transuranic Storage Area
TSF	Test Support Facility
WAS	Waste Area Group
WAG1	Test Area North
WAG3	Chemical Processing Plant
WERF	Waste Experimental Reduction Facility
WMF	Waste Management Facility
WROC	Waste Reduction Operations Complex
ZPPR	Zero Power Plutonium Reactor

CONVERSION FACTORS

To Convert	Into	Multiply By
Cubic yards	Cubic meters	0.7646
Cubic meters	Cubic feet	35.3140
Liters	Gallons (U.S. liquid)	0.2642
Kilograms	Pounds	2.2046

DEFINITIONS

Curie A unit of radioactivity, defined as that quantity of any radioactive nuclide that has 3.7E+10 disintegrations per second (abbreviated Ci).

Exponential notation Numbers in this document are expressed as either whole numbers or in exponential notation form. For example: 1,000,000 = 1 x 10^6 = 1E+06.

RADIOACTIVE WASTE MANAGEMENT INFORMATION FOR 1997 AND RECORD-TO-DATE

INTRODUCTION

This document summarizes radioactive waste data records for the Idaho National Engineering and Environmental Laboratory (INEEL) compiled since 1952, and provides detailed data for calendar year (CY) 1997. A computerized radioactive waste tracking system has been used at the INEEL since January 1971.

Several improvements to the data base system and data reporting have taken place since data collection was computerized. These improvements include:

- In 1982, the data base language was converted from COBOL to NOMAD, a fourth generation data base language. NOMAD had many statistical analysis features that were applied to the data, and allowed for modifying data reporting requirements with minimal impact on the data base.

- In January 1986, solid waste data reporting requirements changed from a per-shipment basis to a per-container basis. A shipment could consist of 1 to 70 containers. By changing to a per-container basis, solid waste location on the INEEL is tracked more accurately. It is now possible to identify each container and to determine its waste classification.

- In February 1988, waste generators were given the ability to provide the analytical uncertainty, at one sigma, for the reported nuclides of air and liquid effluent releases.

- In May 1996, the process to convert the data from NOMAD to the Oracle language identified one improper location coding. The correction of this coding caused 10 cubic meters and 82 curies, not previously reported, to now be reported for WMC 1987 transuranic storage area (TSA) total.

- In June 1996, the conversion from NOMAD to the ORACLE platform was completed. As a result of this platform change the precision of waste calculation results has been improved. Using the NOMAD code with a value retrieved for use in calculations the value was truncated. For example if the original number was 2,440,132,560 it would be truncated for calculations to 2.440E+06 resulting in a loss of 132,560. The greater the original number, the greater the precision loss. With the ORACLE platform for calculations the numbers are rounded rather than truncated. This change will show up as differences between the older NOMAD reports and the current ORACLE calculation method.

- In June 1997, the Environmental Database Integration project was initiated to bring together waste tracking systems across the INEEL into one reporting system. Historical information from the Radioactive Waste Management Information System (RWMIS) was loaded into a data repository. All previous reporting capabilities are available in the Integrated Waste Tracking System (IWTS) along with additional detailed information for tracking containerized waste that was previous unavailable.

U.S. Department of Energy (DOE) contractors routinely report information on airborne and liquid radioactive effluents and solid radioactive waste

that is stored, disposed, and sent to the INEEL for reduction. Types of information include volume, radioactivity, isotopic identity, and origin. This system serves as the official repository for this data and provides reports for all types of radioactive effluents and waste disposed, sent for volume reduction, or stored at the INEEL.

Graphics were added to the report in 1987 to improve the data presentation. The area-specific solid low-level waste graphs in this report depict waste in five categories:

1. Direct Disposal—waste that is sent directly to the Radioactive Waste Management Complex for disposal with no volume reduction efforts applied.
2. Compaction—Compatible waste that is sent to the Waste Experimental Reduction Facility (WERF) to be compacted.
3. Metal Sizing—Metallic waste that is sent to WERF for volume reduction.
4. Incineration—Combustible waste sent to WERF for incineration.
5. Waste shipped to off-site facilities for volume reduction or disposal.

In 1990, additional reports and graphics were added to better represent previously summarized data. These reports and graphics included a detailed list of generators who ship waste to WERF and details on stored waste by generator.

The waste tracking system is continually undergoing review and enhancement. Comments on the system are encouraged. This report is updated annually to incorporate waste management data for the current year and to reflect changes from previous annual reports. These changes are made to more accurately reflect the current status of waste operations at the INEEL.

Annual and special waste reports have been useful to various levels of management in appraising their radioactive waste programs. Annual reports provide a summary by type and producer of waste. The volume, weight, and curie content in all reports are expressed in exponential notation.

A comparison of the annual mean average released nuclides concentrations and the Derived Concentrations Guide (DCG) limits are included in the detailed tracking system. The concentration of liquid releases is compared directly to the reference DCG limits for drinking water. It must be noted that the DCG liquid release limits are for protecting the public from ingesting radiation-contaminated water. INEEL liquid releases flow to areas inaccessible to the general public. The calculated concentration of airborne releases as dispersed to the INEEL boundary is compared to the reference airborne DCG limits. The reference DCG values are given in DOE Order 5400.5, "Radiation Protection of the Public and the Environment," February 1990. The right-hand column of many reports indicate total and average values. Total values include the total content in curies for each radionuclide released during the year. Average values are the annual mean concentrations of radionuclides.

The tracking and reporting system provides readily available information that permits ongoing evaluation of INEEL waste management activities, including compliance with DOE regulations and those of other federal and state agencies. The database continues to be a valuable asset to the overall management effort at the INEEL and continues to alert the DOE Idaho Operations Office (DOE-ID) of trends and potential problem areas.

Reports Included in Document

Six report categories are included in this document. A brief description of each is below.

INEEL Record-to-Date Summary—This report summarizes the volume and curies of all effluents and solid waste on the INEEL by CY for the period 1988 to 1997 and a cumulative total for 1952 to 1987.

INEEL Record-to-Date Discharges and Solid Waste—These reports summarize the volume and curies of all discharges and solid waste on the INEEL by discharge/waste type for each area generating waste by CY for the period 1988 to 1997 and a cumulative total for 1952 to 1987.

INEEL 1997 Year-to-Date Summary—This report summarizes, by facility, the amounts of radioactivity generated at INEEL facilities or at offsite facilities and shipped to the INEEL. Liquid and airborne waste that is released is identified, and quantities of solid wastes stored, disposed, or received for reduction are given. The volume of the media containing the radioactivity is also included.

Nuclide Summary in Curies for Airborne, Liquid, and Solid Waste—These reports summarize the annual curie values, by nuclide, for each area reporting effluents or solid waste on the INEEL.

Area 1997 Graphics—These graphics include volume and curie monthly data for airborne, liquid, and solid waste generated by INEEL areas and for non-INEEL areas shipping solid waste to the INEEL.

Engineered Release Points —These tables identify the area and type of discharge of the airborne and liquid waste released to the environment.

INEEL Record-to-Date Summary

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL RECORD-TO-DATE SUMMARY

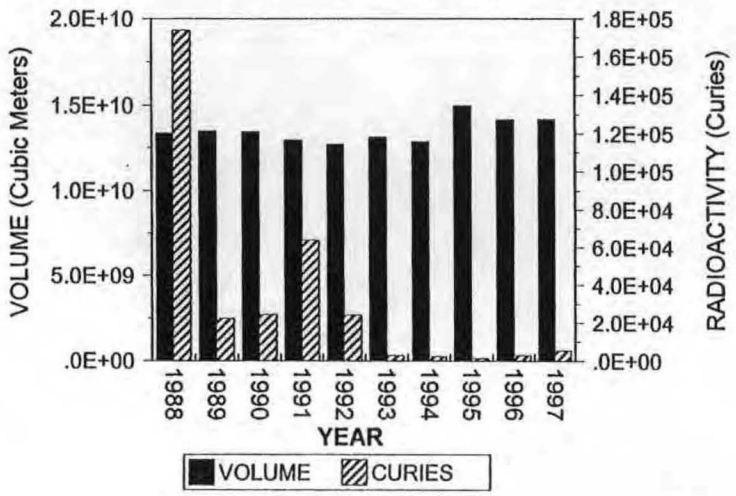
TYPE / YEAR	1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
AIRBORNE												
VOLUME	174813	13389	13514	13450	12963	12715	13150	12856	14968	14174	14187	310179
CURIES	13398492	173936	22370	24459	63879	24179	2719	2228	1380	2904	5327	13,721,872
LIQUID												
VOLUME	80053	2357	1922	2642	2490	2799	2659	1995	1779	2239	2336	103270
CURIES	75317	270	137	189	170	187	130	50	84	73	100	76,707
CONTAINERIZED DISPOSED ONSITE												
VOLUME	201049	2045	1364	1762	1272	844	852	1906	1189	677	1559	214518
CURIES	10813160	149743	590070	20754	187565	143953	429594	4952	25907	14445	15954	12,627,462
CONTAINERIZED DISPOSED OFFSITE												
VOLUME										2690		2690
CURIES										<1		0
CONTAINERIZED STORED												
VOLUME	62921	1073	875	2	37	268	448	407	595	600	1623	68870
CURIES	982601	43481	56235	1772	<1	<1	856	6	5901	1052	129	1,092,034
CONTAINERIZED TO SEG FOR REDUCTION*												
VOLUME								1713	899	1279	58	3950
CURIES								26	4	4	<1	33
CONTAINERIZED TO WERF FOR REDUCTION												
VOLUME	6340	2962	2627	2973	1872	876	1073	782	1266	2018	5526	28315
CURIES	9	6	6	12	15	12	4	1	4	13	28	111
CONTAINERIZED WERF INVENTORY												
VOLUME						18	653	122	131	507	2037	3468
CURIES						<1	2	<1	<1	<1	8	11

1 LIQUID VOLUME IN MILLIONS OF LITERS ONE CUBIC METER EQUALS 35.31 CUBIC FEET
2 AIRBORNE VOLUME IN MILLIONS OF CUBIC METERS ONE MILLION LITERS EQUALS 264,180 GALLONS
3 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING
4 * DOES NOT INCLUDE WASTE SHIPPED TO SEG FROM WERF

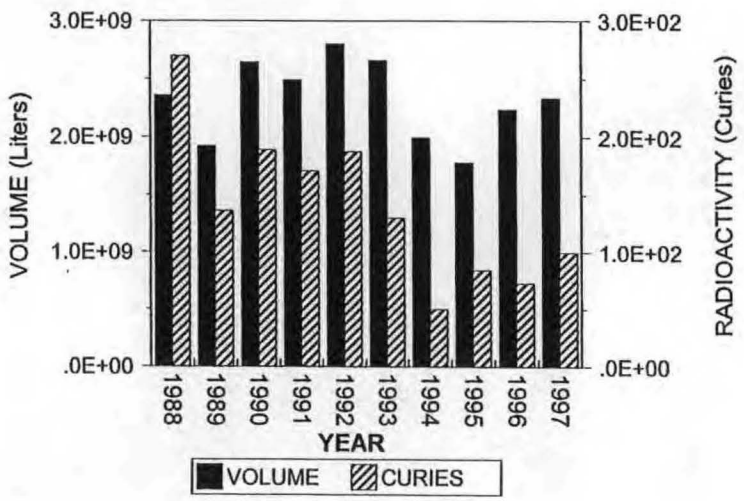
TT22EB01
Run Date: 05/13/1998

INEEL RECORD-TO-DATE SUMMARY CY 1997

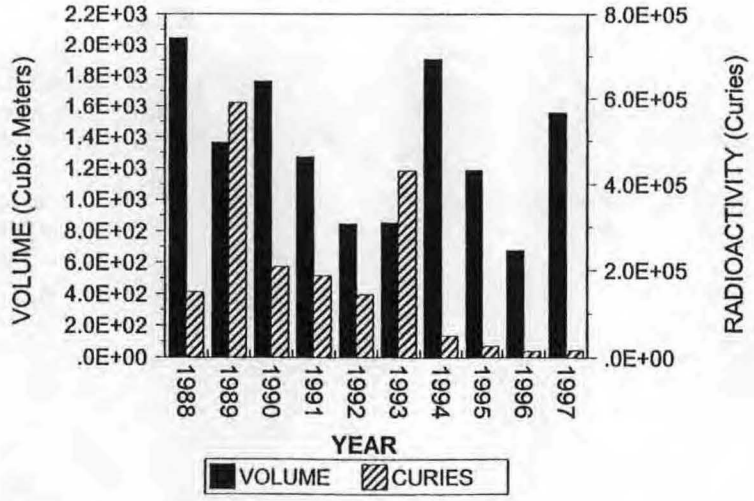
INEEL 1988 - 1997 AIRBORNE EMISSIONS VOLUME & CURIES



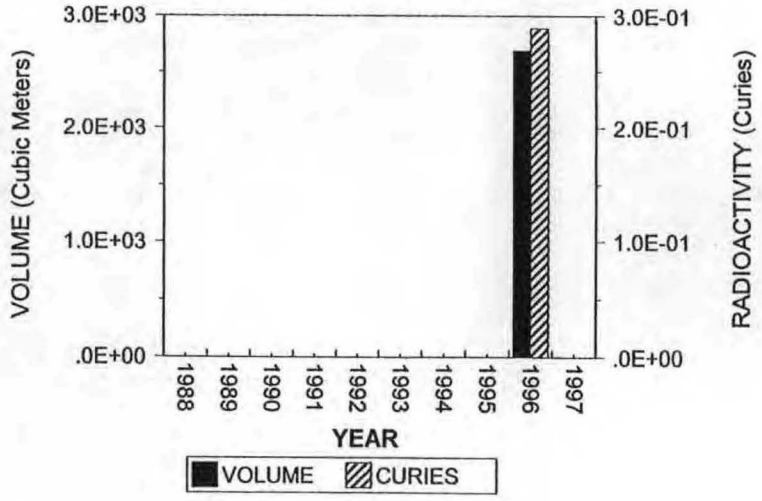
INEEL 1988 - 1997 LIQUID EFFLUENT VOLUME & CURIES



INEEL 1988 - 1997 CONTAINERIZED DISPOSED ONSITE WASTE



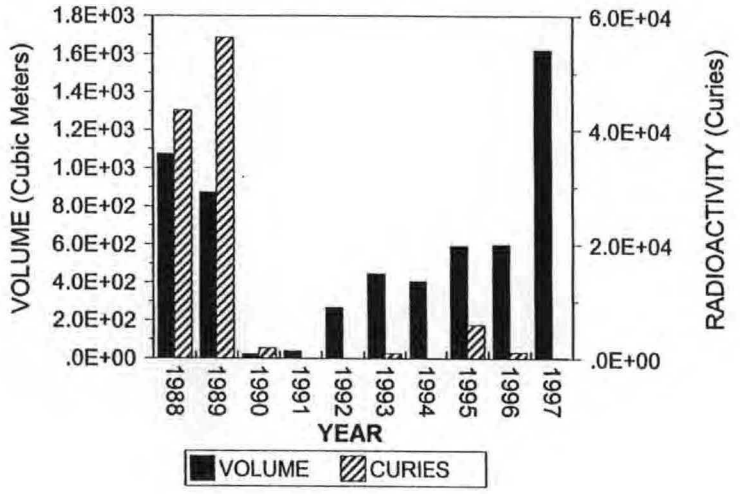
INEEL 1988 - 1997 CONTAINERIZED DISPOSED OFFSITE WASTE



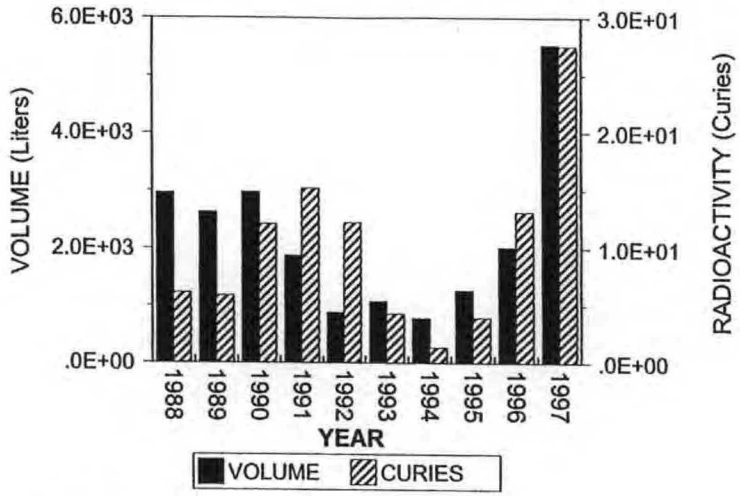
Graph: G22EB01

INEEL RECORD-TO-DATE SUMMARY CY 1997

1988 - 1997 CONTAINERIZED STORED WASTE

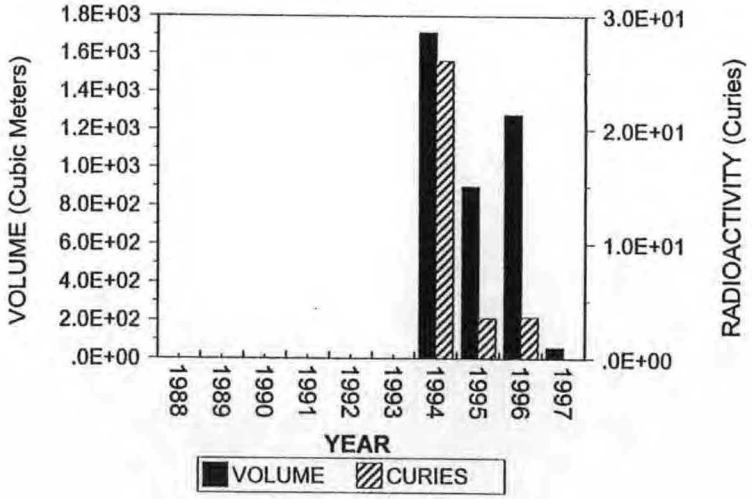


1988 - 1997 CONTAINERIZED WASTE TO WERF FOR VOLUME REDUCTION



WERF began reducing waste in 1984

1988 - 1997 INCINERABLE WASTE SENT TO PRIVATE INDUSTRY



Graph: G22EB02

1994 was the first year private industry was used. Doesn't include waste sent from WERF

INEEL Record-to-Date Discharges and Solid Waste

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL RECORD-TO-DATE SUMMARY
AIRBORNE WASTE DISCHARGES

AREA / YEAR		1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
ANLW													
	VOLUME	39532	2554	2540	2535	2542	2542	2522	2520	2405	2414	2408	64515
	CURIES	48269	618	686	716	551	739	1160	1154	10	1049	3606	58560
ARA													
	VOLUME	527	32										560
	CURIES	<1	<1										0
CF													
	VOLUME	1154	59	58	58	58	58	34					1481
	CURIES	<1	<1	<1	<1	<1	<1	<1					0
CPP													
	VOLUME	51906	3893	3794	3827	3916	3895	4244	4156	4106	3264	2585	89586
	CURIES	7851018	170708	20002	20002	60043	20000	62	<1	<1	<1	132	8141968
CTF													
	VOLUME	218											218
	CURIES	<1											0
LOF													
	VOLUME	822											822
	CURIES	8810											8810
NRF													
	VOLUME	34061	1745	2377	2151	1795	1654	1646	1329	1983	3300	3769	55810
	CURIES	36	<1	<1	<1	<1	<1	1	2	1	1	<1	44
PBF													
	VOLUME	1082	60	60	62	63	58	52	59	54	60	60	1669
	CURIES	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0
PER													
	VOLUME	<1											<1
	CURIES	6											6
SMC													
	VOLUME	3394	3046	2812	3031	3122	3047	3141	3166	4710	3306	3560	36334
	CURIES	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0
TAN													
	VOLUME	16148	645	632	492	191	182	191	197	131	177	137	19123
	CURIES	53725	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	53725

1 Volume in millions of cubic meters
2 Details may not add up because of rounding.

AE22DB01
Run Date: 05/18/1998

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

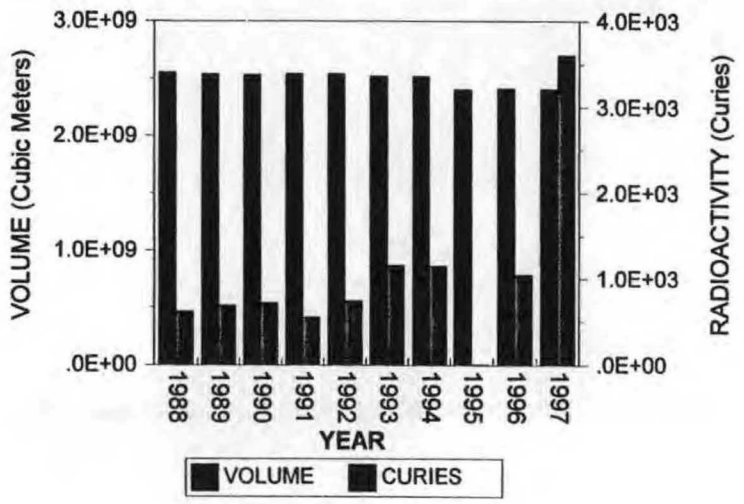
INEEL RECORD-TO-DATE SUMMARY
AIRBORNE WASTE DISCHARGES

AREA / YEAR	1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
TRA												
VOLUME	25872	1190	1069	1130	1140	1130	1155	1190	1277	1351	1386	37890
CURIES	5436627	2609	1682	3741	3284	3439	1495	1072	1368	1854	1588	5458759
WERF												
VOLUME	89	161	156	164	137	135	155	239	301	302	283	2121
CURIES	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0
WMF												
VOLUME	9	4	15			14	10					52
CURIES	<1	<1	<1			<1	<1					0
TOTAL VOLUME	174813	13389	13514	13450	12963	12715	13150	12856	14968	14174	14187	310179
CURIES	13398492	173936	22370	24459	63879	24179	2719	2228	1380	2904	5327	13,721,872

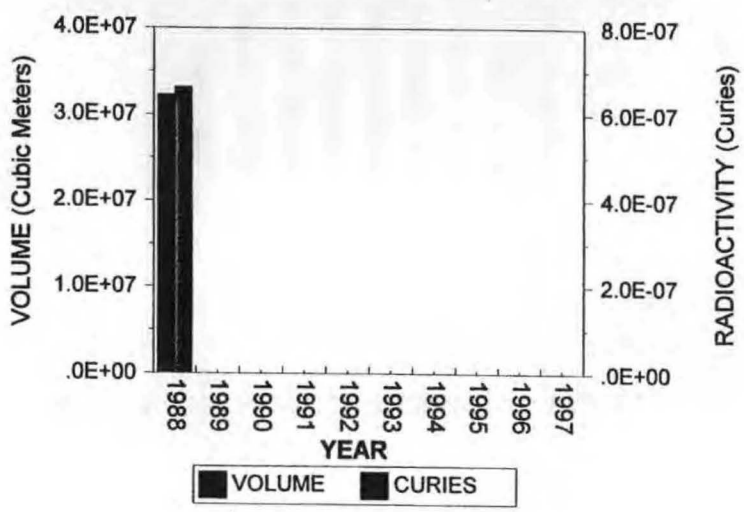
1 Volume in millions of cubic meters
2 Details may not add up because of rounding.

INEEL RADIOACTIVE AIRBORNE WASTE DISCHARGES RECORD-TO-DATE

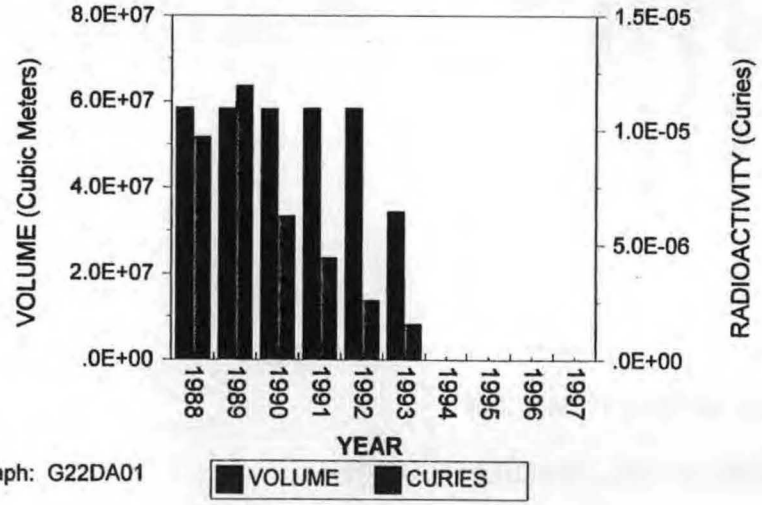
ANLW 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES



ARA 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES

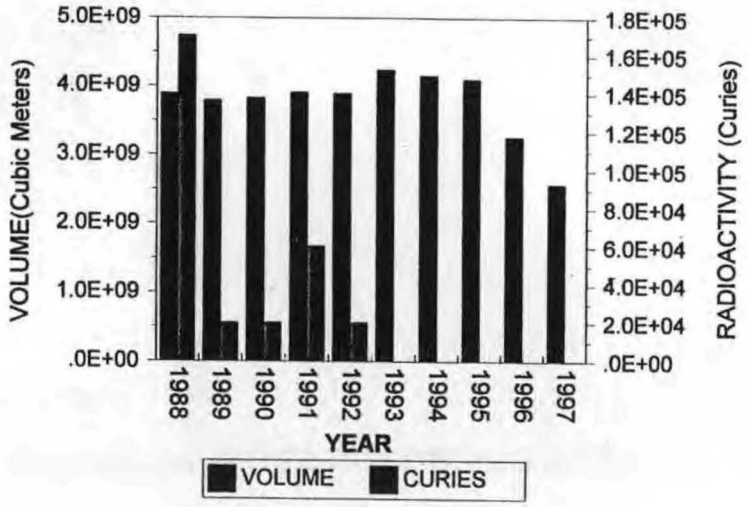


CF 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES



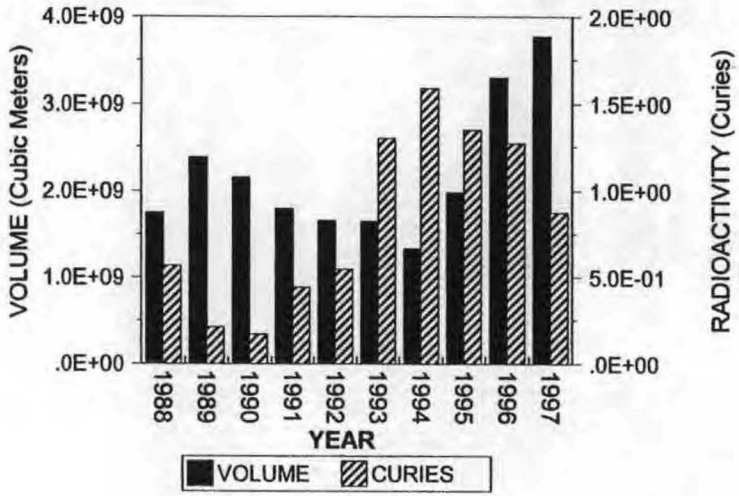
Graph: G22DA01

CPP 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES

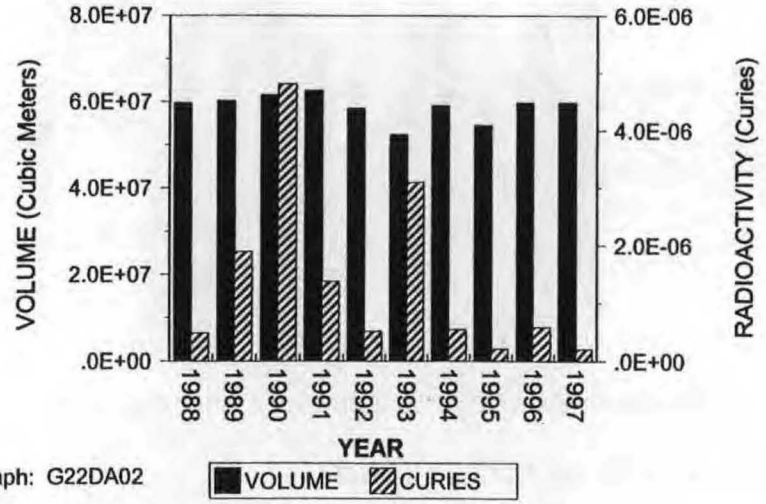


INEEL RADIOACTIVE AIRBORNE WASTE DISCHARGES RECORD-TO-DATE

NRF 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES

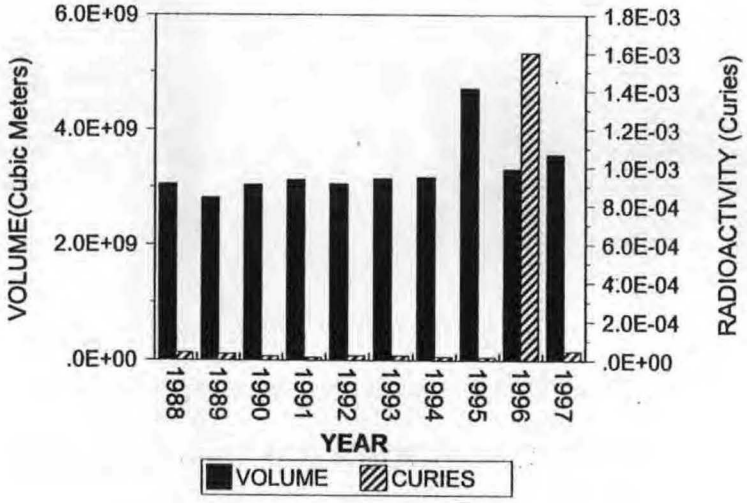


PBF 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES



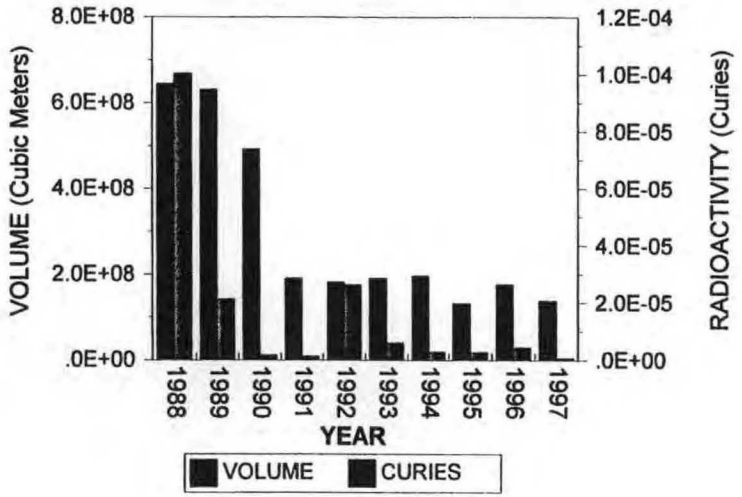
Graph: G22DA02

SMC 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES

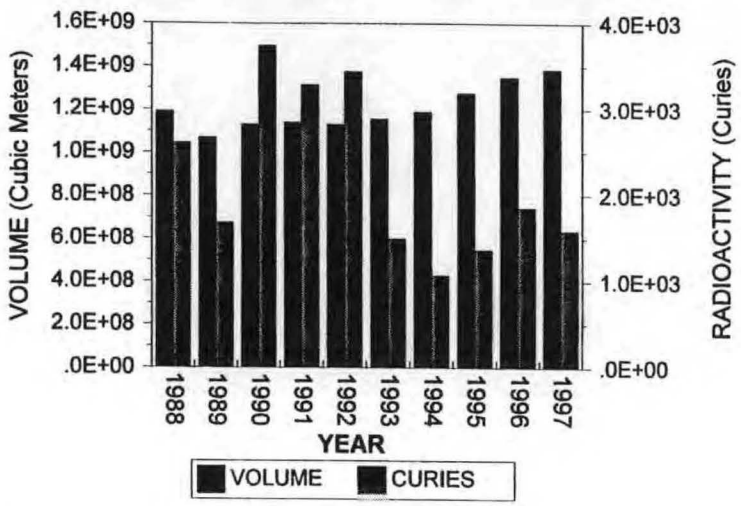


INEEL RADIOACTIVE AIRBORNE WASTE DISCHARGES RECORD-TO-DATE

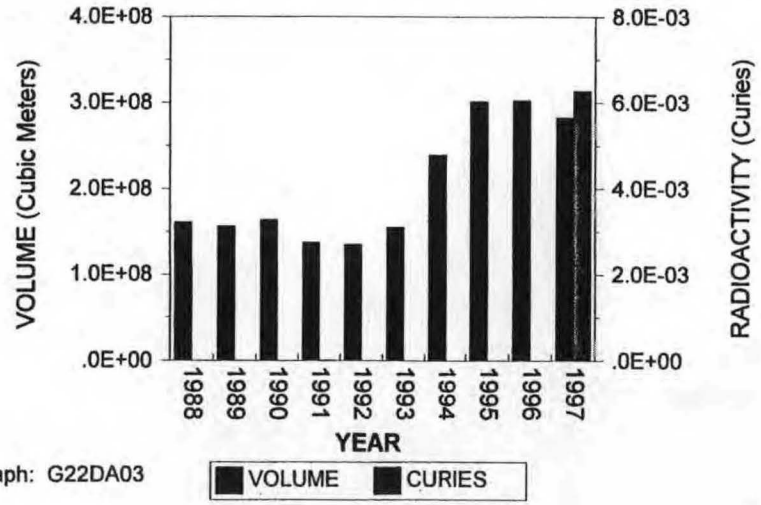
TAN 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES



TRA 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES

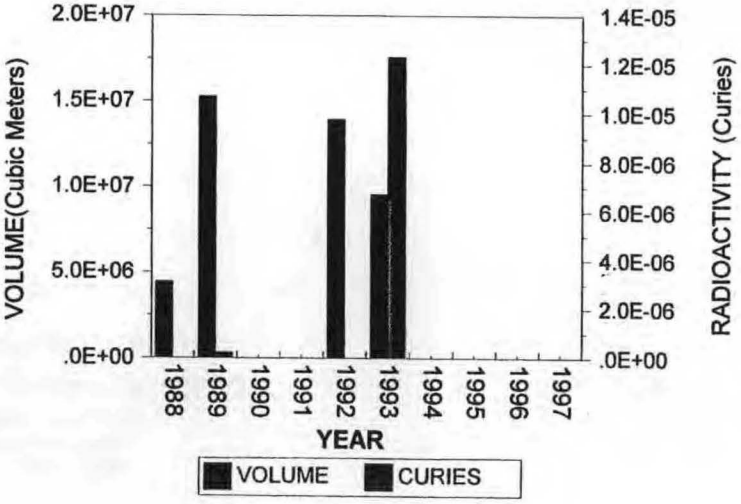


WERF 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES



Graph: G22DA03

WMF 1988 - 1997 AIRBORNE EMISSION VOLUME & CURIES



Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL RECORD-TO-DATE SUMMARY
LIQUID WASTE DISCHARGES

AREA / YEAR	1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
ANLW												
VOLUME	72	2	1	2	2	1	5	5				91
CURIES	22	<1	<1	<1	<1	<1	<1	<1				23
ARA												
VOLUME	63	1										65
CURIES	<1	<1										0
CF												
VOLUME	4938	62	117	154	192	160	44					5668
CURIES	53	1	2	2	3	3	<1					65
CPP												
VOLUME	49116	2140	1664	2357	2107	2433	2515	1964	1751	2219	2316	70582
CURIES	22161	89	<1	<1	2	<1	<1	<1	<1	<1	<1	22,254
CTF												
VOLUME	93											93
CURIES	<1											0
LOF												
VOLUME	2813											2813
CURIES	<1											0
NRF												
VOLUME	1569											1569
CURIES	349					<1						349
PBF												
VOLUME	9											9
CURIES	<1											0
PER												
VOLUME	76											76
CURIES	155											155
TAN												
VOLUME	2277	81	67	58	90	116	24					2712
CURIES	59	<1	<1	<1	<1	<1	2					61
TRA												
VOLUME	19028	70	73	71	99	88	71	25	28	20	20	19591
CURIES	52518	179	134	185	165	184	128	50	84	73	100	53,800

1 Volume in million liters
2 Details my not add up to totals because of rounding.

LE22CB01
Run Date: 05/12/1998

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

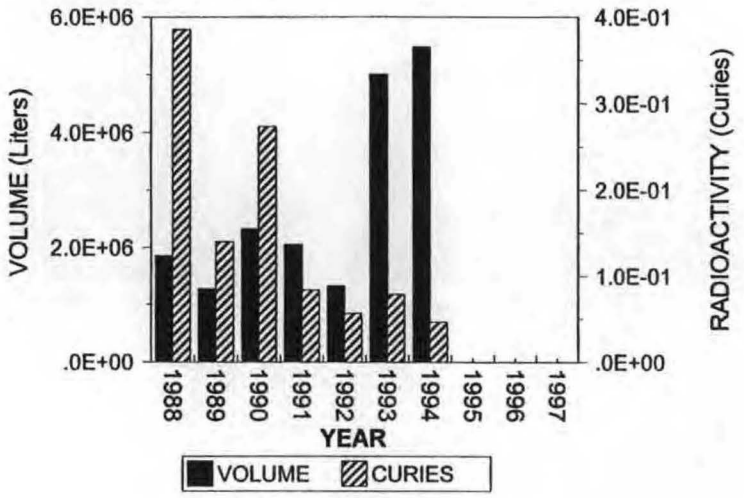
INEEL RECORD-TO-DATE SUMMARY
LIQUID WASTE DISCHARGES

AREA / YEAR	1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
WMF												
VOLUME												<1
CURIES	<1											0
TOTAL VOLUM	80053	2357	1922	2642	2490	2799	2659	1995	1779	2239	2336	103270
CURIES	75317	270	137	189	170	187	130	50	84	73	100	76,707

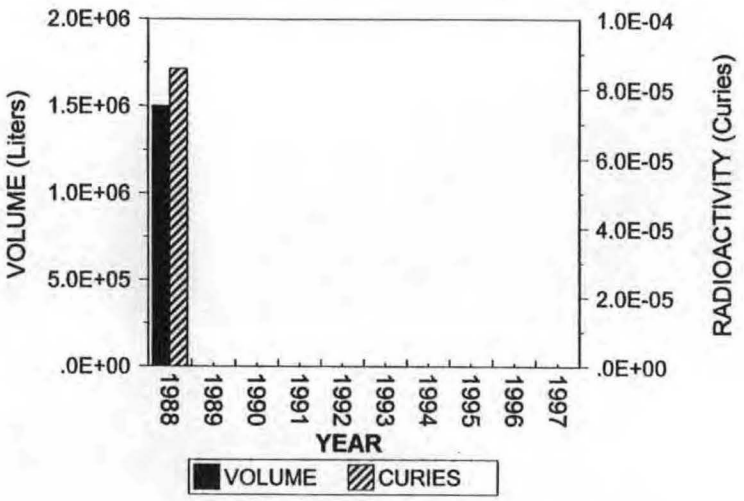
1 Volume in million liters
2 Details my not add up to totals because of rounding.

INEEL RADIOACTIVE LIQUID WASTE DISCHARGE RECORD-TO-DATE

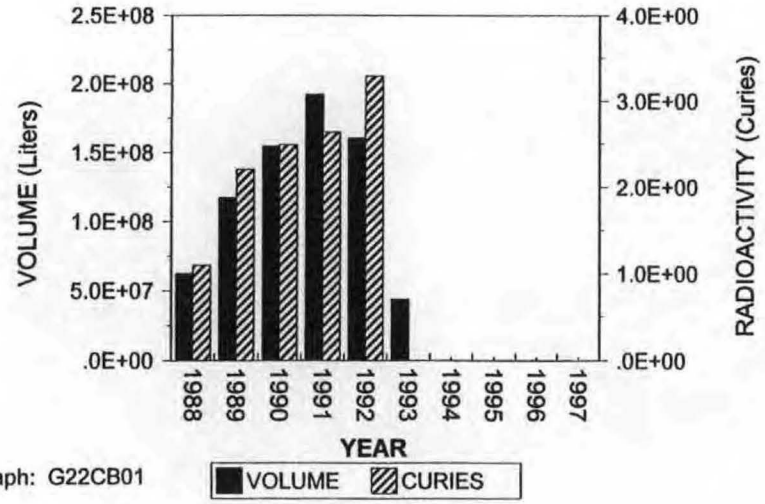
ANLW 1988 - 1997 LIQUID EFFLUENT VOLUME & CURIES



ARA 1988 - 1997 LIQUID EFFLUENT VOLUME & CURIES

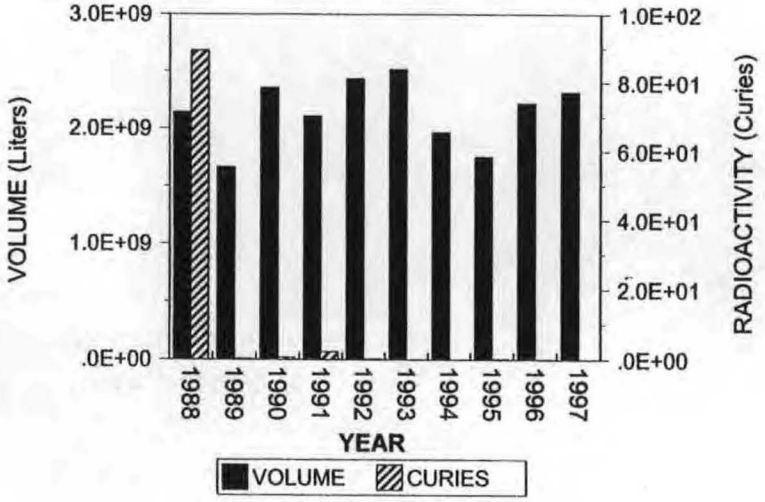


CF 1988 - 1997 LIQUID EFFLUENT VOLUME & CURIES



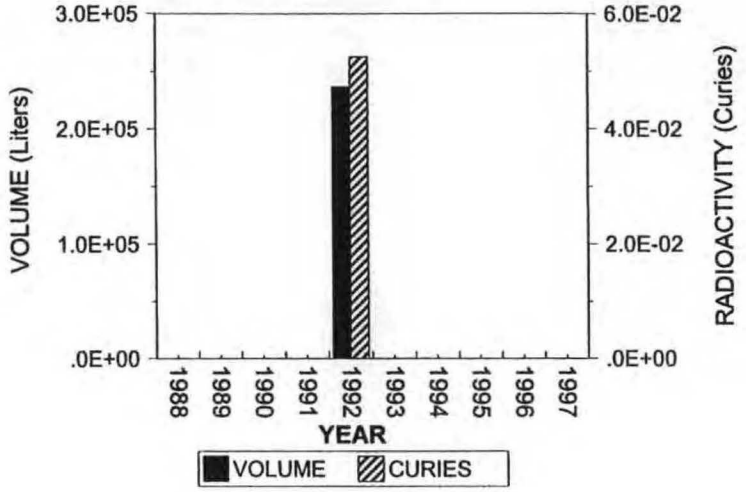
Graph: G22CB01

CPP 1988 - 1997 LIQUID EFFLUENT VOLUME & CURIES

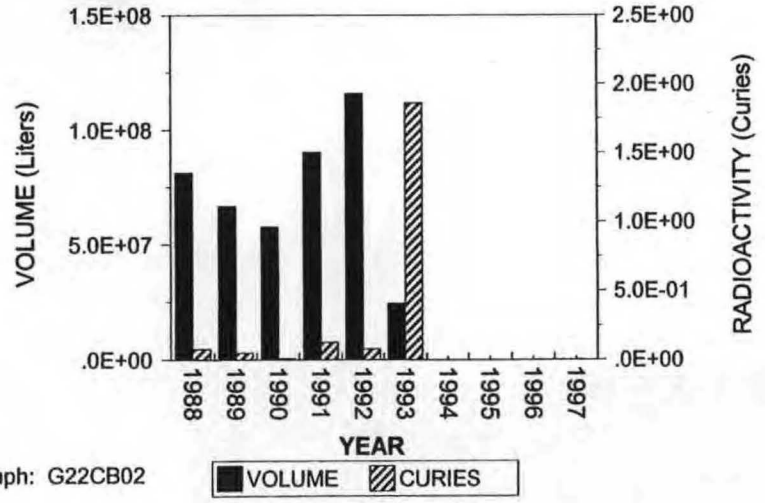


INEEL RADIOACTIVE LIQUID WASTE DISCHARGE RECORD-TO-DATE

NRF 1988 - 1997 LIQUID EFFLUENT VOLUME & CURIES

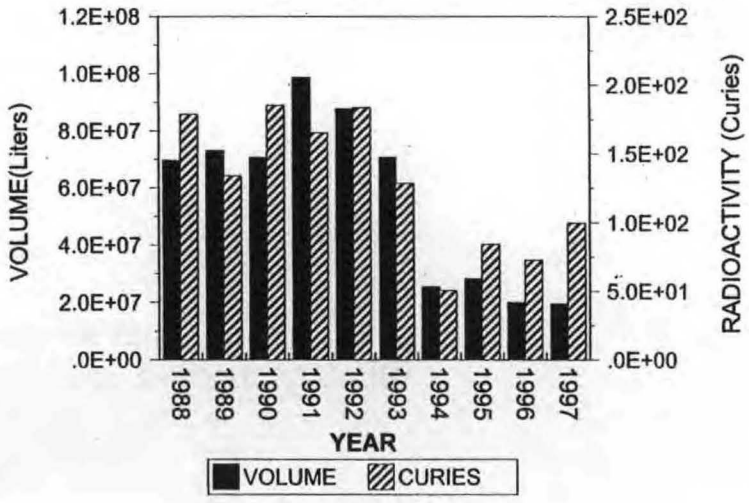


TAN 1988 - 1997 LIQUID EFFLUENT VOLUME & CURIES



Graph: G22CB02

TRA 1988 - 1997 LIQUID EFFLUENT VOLUME & CURIES



Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY

DISPOSED WASTE

AREA / YEAR	1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
OTHER*												
VOLUME	1365											1,365
CURIES	2434											2,434
OFFSITE												
VOLUME	6501											6,501
CURIES	37734											37,734
SL-1												
VOLUME	2319											2,319
CURIES	599											599
ANLE												
VOLUME	5194	204										5,398
CURIES	1431	50										1,481
ANLW												
VOLUME	7630	473	172	65	30	56	77	211	46	5	228	8,994
CURIES	1619940	142616	463322	130512	82260	92899	87062	12303	2	16	10	2,630,942
ARA												
VOLUME	435							101				536
CURIES	4025							<1				4,025
BEN												
VOLUME	<1											1
CURIES	<1											0
BNL												
VOLUME	5											5
CURIES	<1											0
CEG												
VOLUME							22					22
CURIES							1967					1,967
CF												
VOLUME	2495	5	4	45			84	42	58	<1		2,733
CURIES	385	<1	<1	<1			<1	<1	<1	3		388
CPP												
VOLUME	30669	578	513	752	544	129	7	127	157	145	150	33,771
CURIES	614459	192	115	211	24	2	<1	2	24	5	1	615,036

1 VOLUME IN CUBIC METERS
2 * ML-1, GCRF, OMRE
3 #FACILITY TOTALS (EXCEPT FOR RFO) DO NOT INCLIDE DATA FOR 1952-1960:
4 THIS INFORMATION (18460 CUBIC METERS AND 60920 CURIES) IS REPORTED IN LUMP SUM UNDER WMC FOR 1960
5 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

SD22AB01
Run Date: 05/12/1998

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY

DISPOSED WASTE

AREA / YEAR		1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
CTF													
	VOLUME	1056	27					54					1,138
	CURIES	302	<1					<1					303
D+D													
	VOLUME	2410	95	24	21	58	185	344	654	247	246	141	4,425
	CURIES	5693	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	5,696
LOF													
	VOLUME	73											73
	CURIES	3											3
NRF													
	VOLUME	20984	111	134	419	270	159	146	222	165	96	347	23,055
	CURIES	4223387	6732	126489	74089	102848	49796	42198	36901	17619	14158	11707	4,705,924
PBF													
	VOLUME	925	29	6		2			179			25	1,166
	CURIES	569	3	<1		<1			<1			<1	573
PER													
	VOLUME	499											499
	CURIES	24											24
RFO													
	VOLUME	73124											73,124
	CURIES	256011											256,011
SMC													
	VOLUME	49	53	21		24	50		34	5			237
	CURIES	<1	<1	<1		<1	<1		2	<1			4
TAN													
	VOLUME	8908	56	76	43	24	87	82	134	57	42	145	9,655
	CURIES	101843	1	67	2658	<1	347	216	<1	24	157	2	105,316
TRA													
	VOLUME	15763	158	62	37	72	179	28	196	133	24	29	16,681
	CURIES	3883393	147	77	68	2430	909	298149	317	8226	105	4214	4,198,035
WAG1													
	VOLUME											<1	1
	CURIES											<1	0

1 VOLUME IN CUBIC METERS
2 * ML-1, GCRF, OMRE
3 #FACILITY TOTALS (EXCEPT FOR RFO) DO NOT INCLIDE DATA FOR 1952-1960:
4 THIS INFORMATION (18460 CUBIC METERS AND 60920 CURIES) IS REPORTED IN LUMP SUM UNDER WMC FOR 1960
5 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

SD22AB01
Run Date: 05/12/1998

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY

DISPOSED WASTE

AREA / YEAR	1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
WAG3												
VOLUME											1	1
CURIES											<1	0
WERF												
VOLUME	664	254	328	359	248		7	5	319	111	489	2,785
CURIES	<1	<1	<1	6	3		<1	<1	11	1	19	41
WMF												
VOLUME	19980		23	22					2	6		20,033
CURIES	60927		<1	<1					<1	<1		60,927
TOTAL VOLUME	201049	2045	1364	1762	1272	844	852	1906	1189	677	1559	214,518
CURIES	10813160	149743	590070	207544	187565	143953	429594	49526	25907	14445	15954	12,627,462

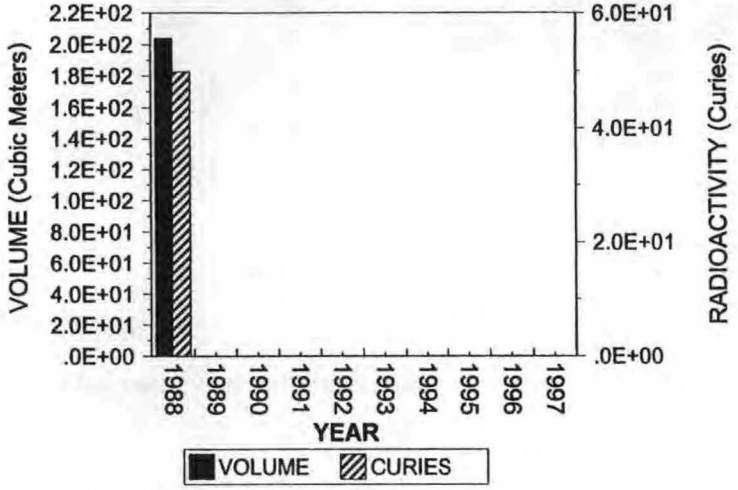
INEEL-20

1 VOLUME IN CUBIC METERS
2 * ML-1, GCRF, OMRE
3 #FACILITY TOTALS (EXCEPT FOR RFO) DO NOT INCLIDE DATA FOR 1952-1960:
4 THIS INFORMATION (18460 CUBIC METERS AND 60920 CURIES) IS REPORTED IN LUMP SUM UNDER WMC FOR 1960
5 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

SD22AB01
Run Date: 05/12/1998

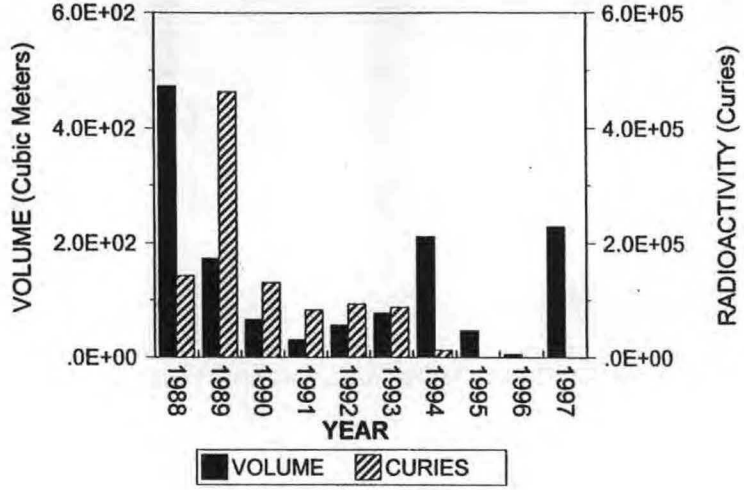
INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY DISPOSED WASTE

ANLE 1988 - 1997 CONTAINERIZED DISPOSED WASTE

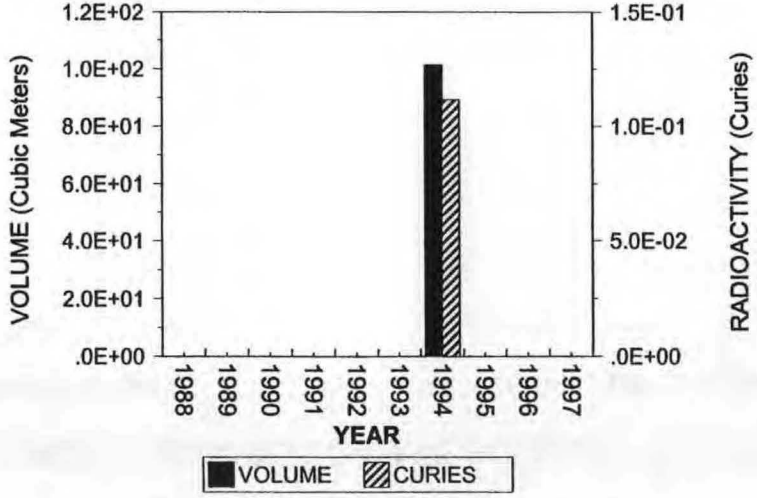


ANLE HAS NOT DISPOSED WASTE AT INEL SINCE 1988

ANLW 1988 - 1997 CONTAINERIZED DISPOSED WASTE



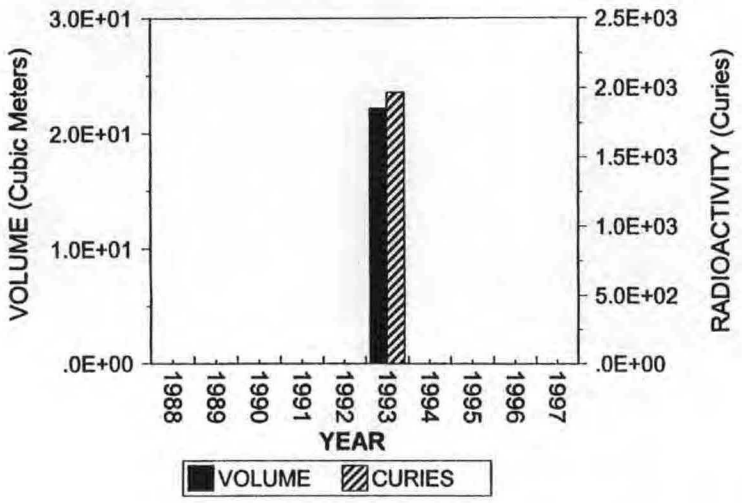
ARA 1988 - 1997 CONTAINERIZED DISPOSED WASTE



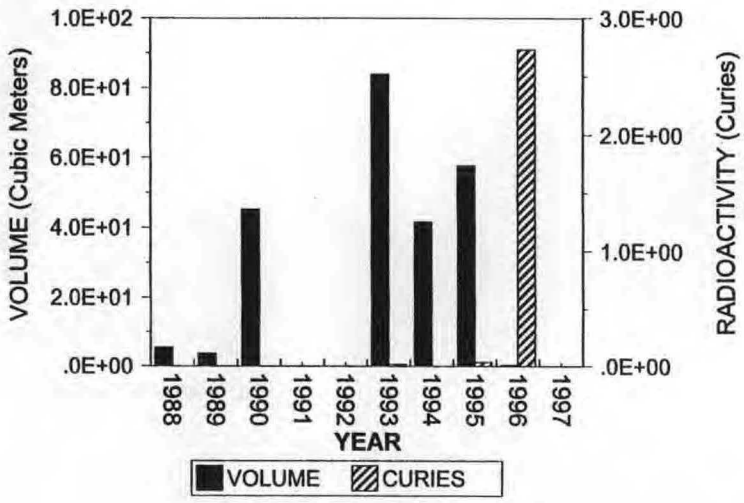
Graph: G22AB01

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY DISPOSED WASTE

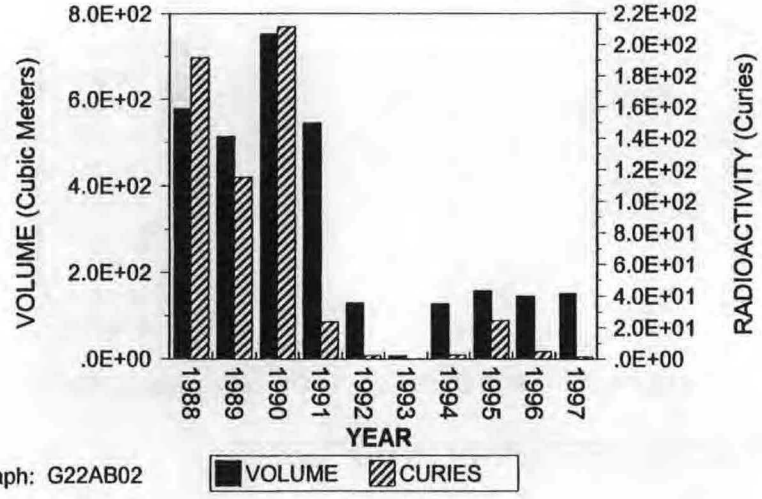
CEG 1988 - 1997 CONTAINERIZED DISPOSED WASTE



CF 1988 - 1997 CONTAINERIZED DISPOSED WASTE

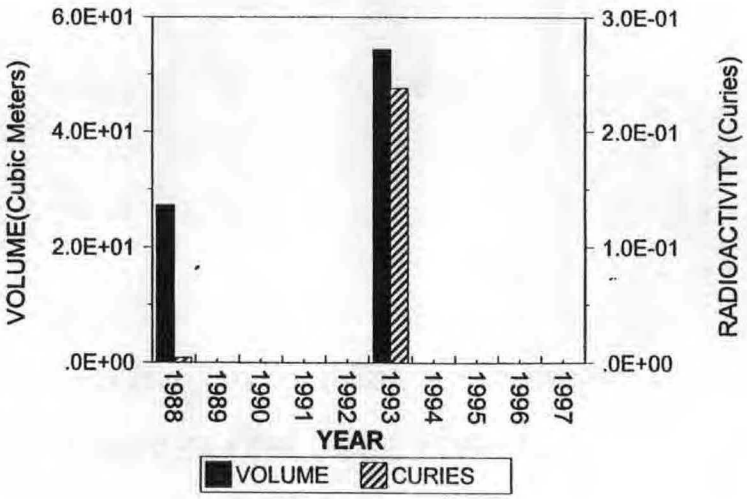


CPP 1988 - 1997 CONTAINERIZED DISPOSED WASTE

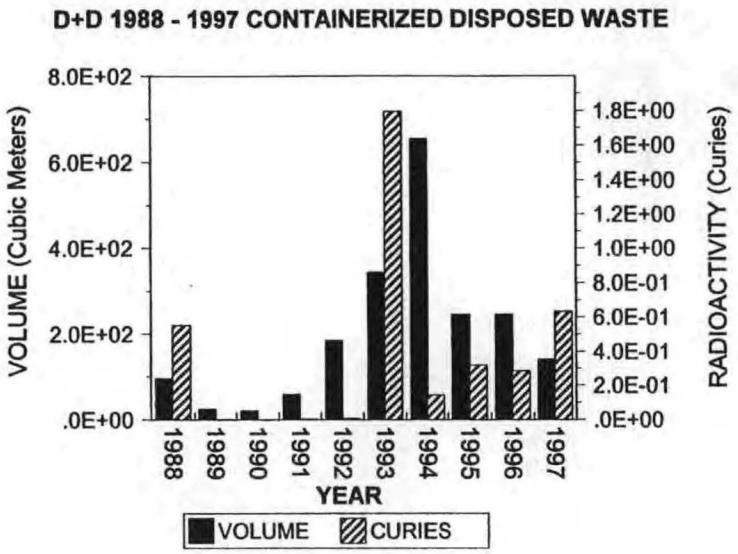


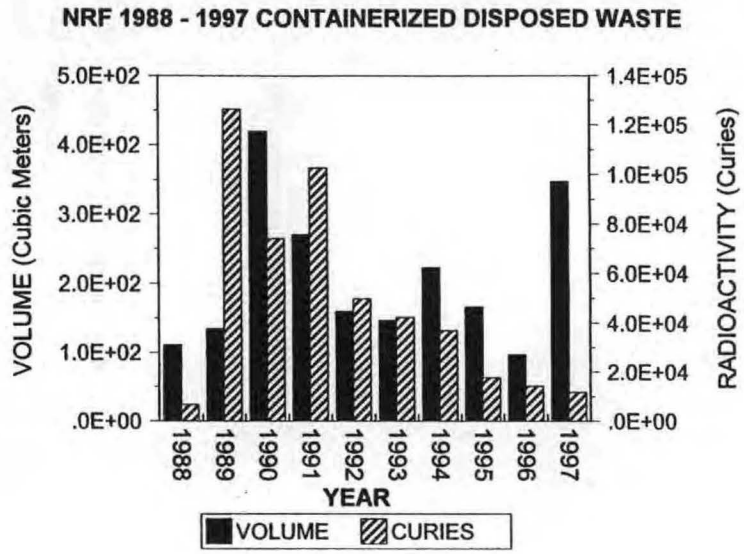
Graph: G22AB02

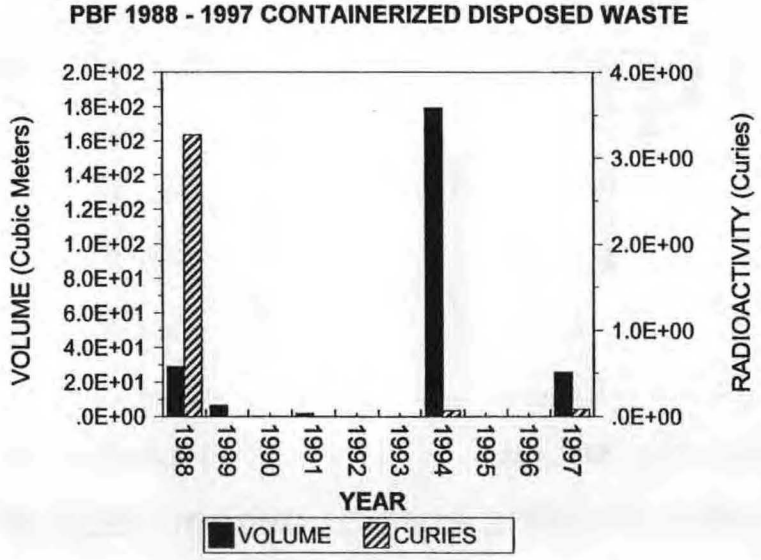
CTF 1988 - 1997 CONTAINERIZED DISPOSED WASTE



INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY DISPOSED WASTE



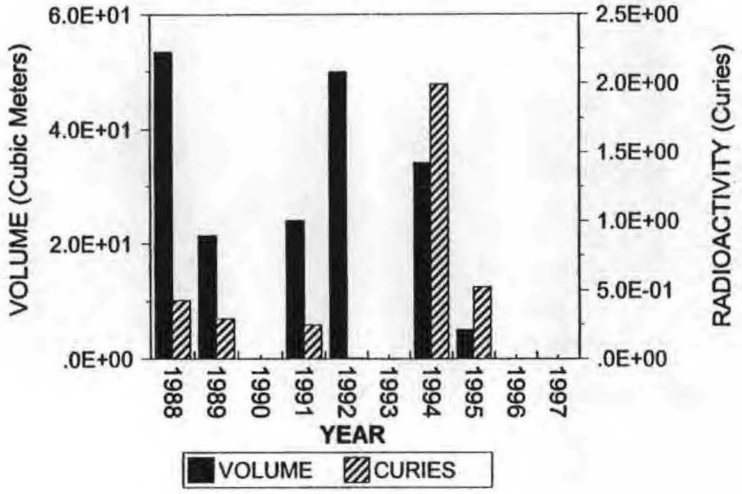




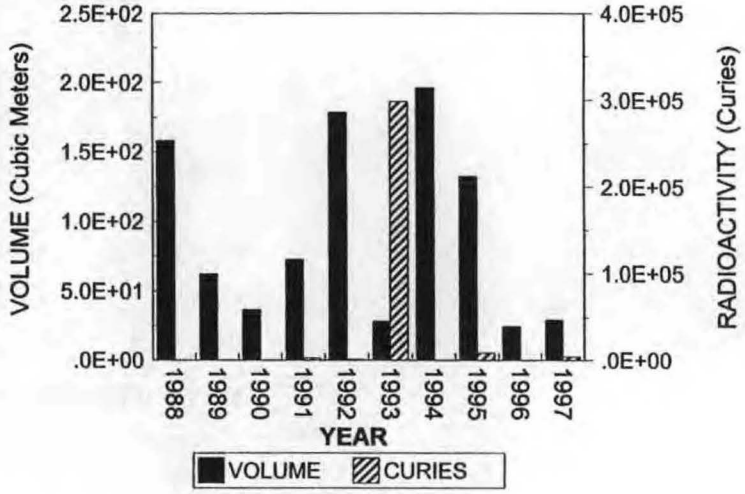
Graph: G22AB03

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY DISPOSED WASTE

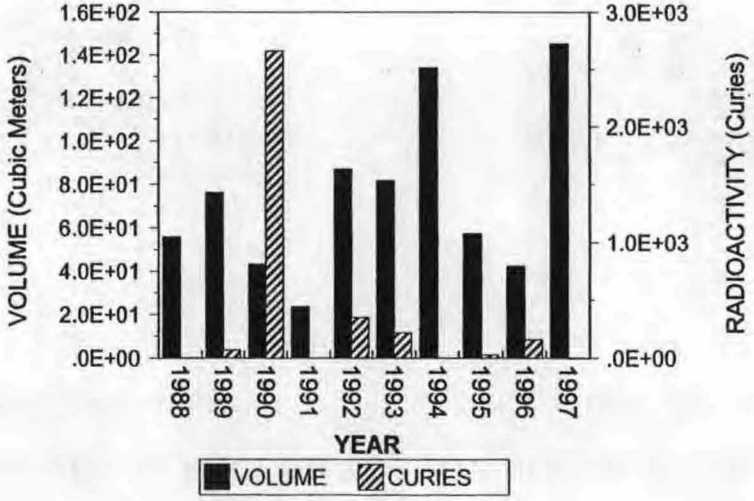
SMC 1988 - 1997 CONTAINERIZED DISPOSED WASTE



TRA 1988 - 1997 CONTAINERIZED DISPOSED WASTE



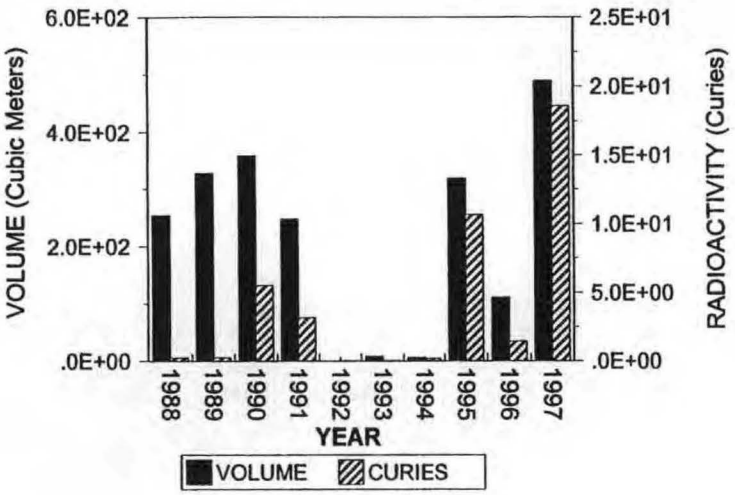
TAN 1988 - 1997 CONTAINERIZED DISPOSED WASTE



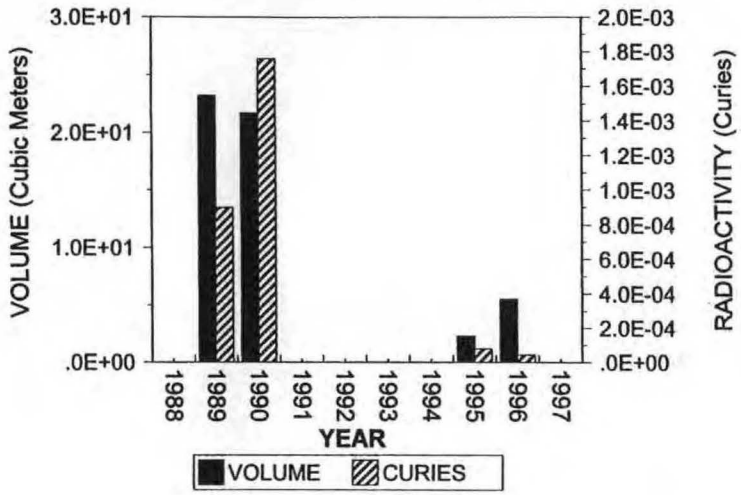
Graph: G22AB04

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY DISPOSED WASTE

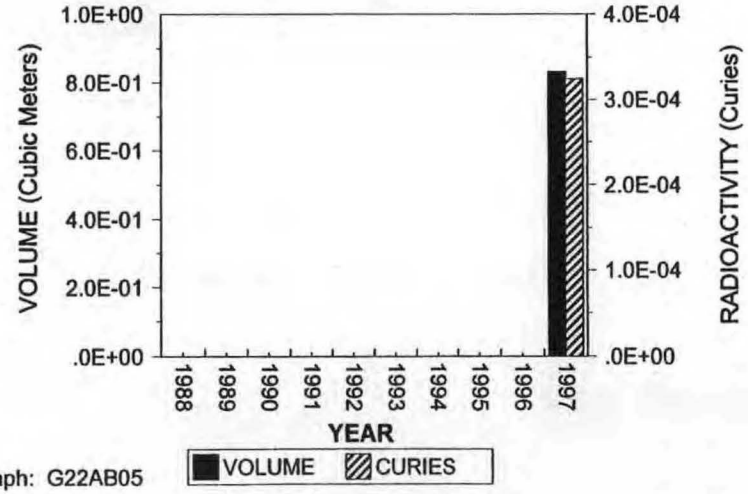
WERF 1988 - 1997 CONTAINERIZED DISPOSED WASTE



WMF 1988 - 1997 CONTAINERIZED DISPOSED WASTE

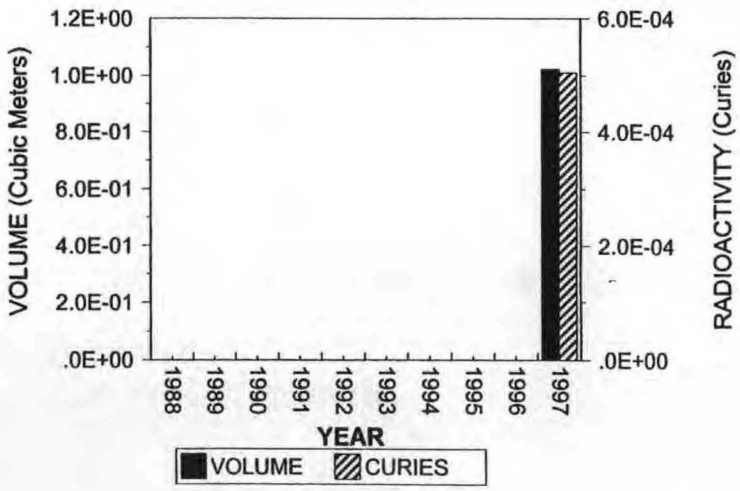


WAG1 1988 - 1997 CONTAINERIZED DISPOSED WASTE



Graph: G22AB05

WAG3 1988 - 1997 CONTAINERIZED DISPOSED WASTE



Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY
ONSITE STORED WASTE

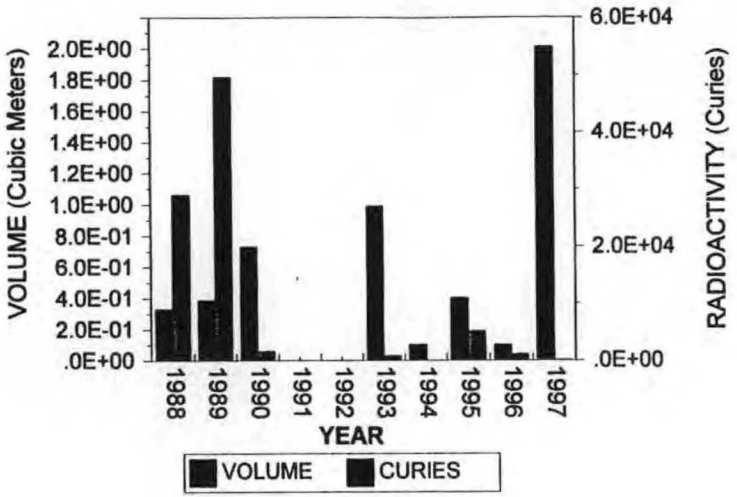
AREA / YEAR		1952-1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
ANLW													
	VOLUME	49	<1	<1	<1			<1	<1	<1	<1	2	54
	CURIES	504106	28956	49612	1569			794	<1	5148	1045	124	591,355
CPP													
	VOLUME			2	5	36	268	441	401	591	575	1107	3,426
	CURIES			<1	<1	<1	<1	3	2	2	2	5	14
ILT													
	VOLUME	52	5		12			6	3	3	<1		81
	CURIES	5690	3913		120			60	4	748	5		10,539
PBF													
	VOLUME											<1	0
	CURIES											<1	0
TAN													
	VOLUME								4		2	506	511
	CURIES								<1		<1	<1	0
TSA													
	VOLUME	62820	1068	873	4	<1	<1			<1	23	8	64,798
	CURIES	472806	10612	6623	83	<1	<1			4	<1	<1	490,127
TOTAL	VOLUME	62921	1073	875	22	37	268	448	407	595	600	1623	68,870
	CURIES	982601	43481	56235	1772	<1	<1	856	6	5901	1052	129	1,092,034

1 VOLUMES IN CUBIC METERS
2 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

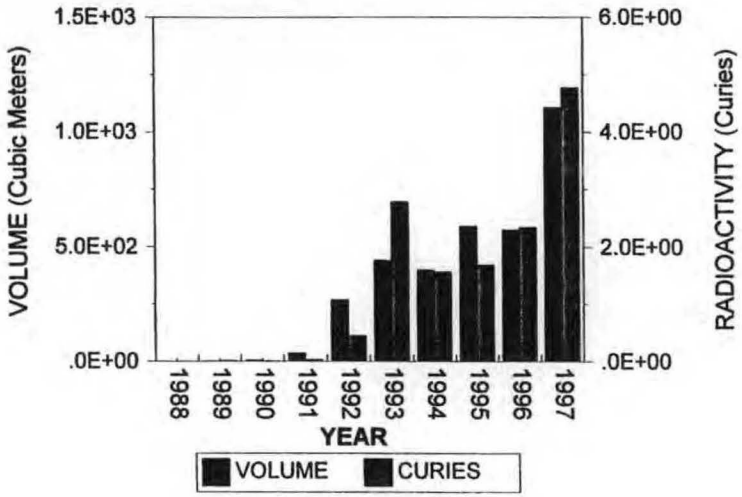
SS22BB01
Run Date: 05/18/1998

INEEL RECORD-TO-DATE SUMMARY STORED WASTE

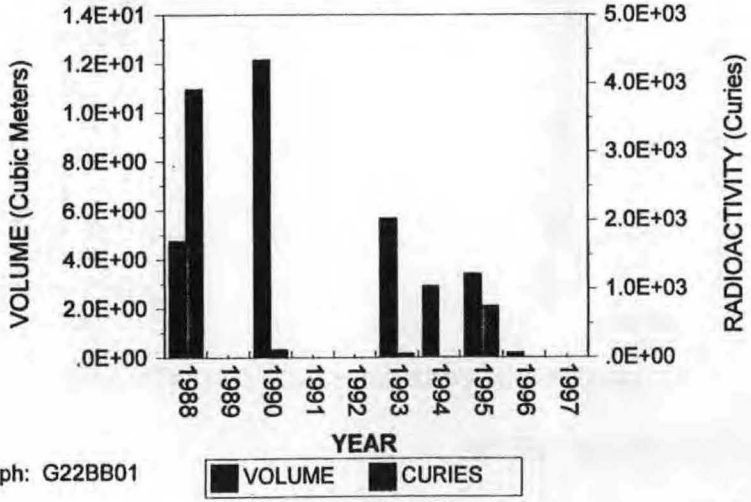
ANLW 1988 - 1997 CONTAINERIZED STORED WASTE



CPP 1988 - 1997 CONTAINERIZED STORED WASTE



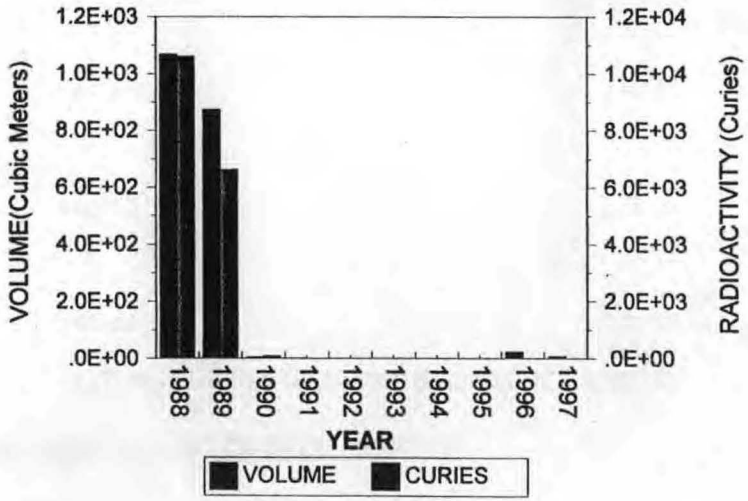
ILT 1988 - 1997 CONTAINERIZED STORED WASTE



Graph: G22BB01

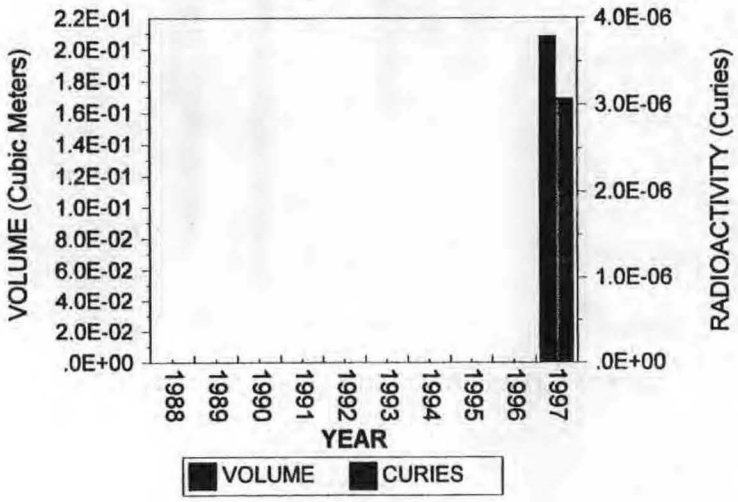
NO WASTE SENT TO ILTSF IN 86, 91, 92, 97

TSA 1988 - 1997 CONTAINERIZED STORED WASTE

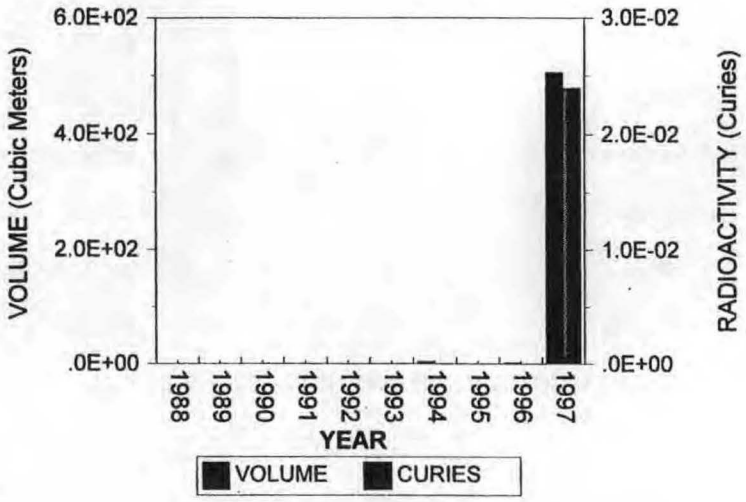


INEEL RECORD-TO-DATE SUMMARY STORED WASTE

PBF 1988 - 1997 CONTAINERIZED STORED WASTE



TAN 1988 - 1997 CONTAINERIZED STORED WASTE



Graph: G22BB02

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INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY

ILTSF WASTE

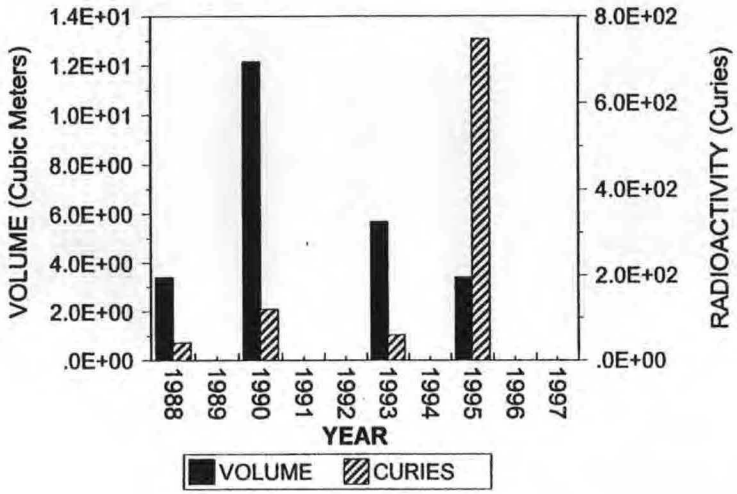
AREA / YEAR	1952-1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
ANLE												
VOLUME	45	3		12			6		3			69
CURIES	328	42		120			60		748			1,297
ANLW												
VOLUME	4	1										5
CURIES	5211	3268										8,479
BET												
VOLUME		<1										0
CURIES		604										604
CPP												
VOLUME	<1											0
CURIES	70											70
NRF												
VOLUME	3											3
CURIES	81											81
TRA												
VOLUME								3		<1		3
CURIES								4		5		9
TOTAL VOLUME	52	5		12			6	3	3	<1		81
CURIES	5690	3913		120			60	4	748	5		10,539

1 VOLUME IN CUBIC METERS
2 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

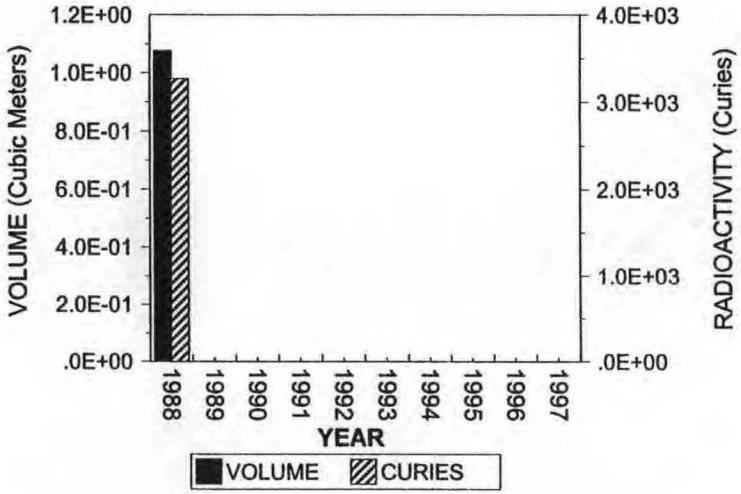
SS22LB01
Run Date: 05/18/1998

INEEL CONTIANERIZED RECORD-TO-DATE SUMMARY
INTERMEDIATE LEVEL TRANSURANIC STORAGE FACILITY (ILTSF) WASTE

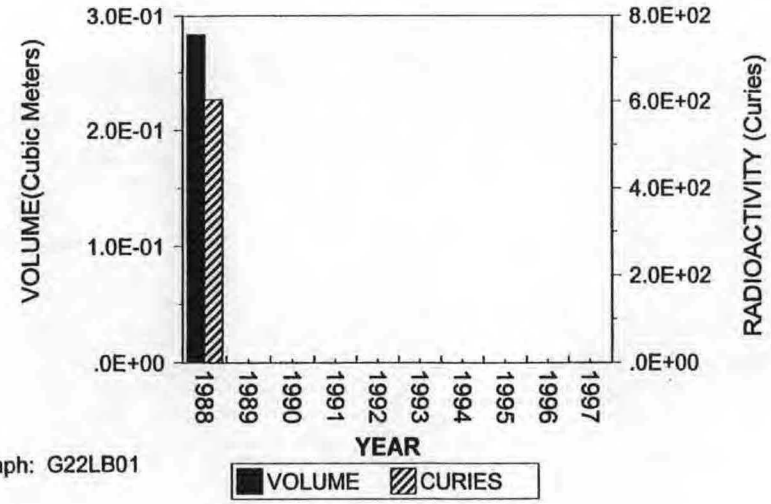
ANLE 1988 - 1997 ILTSF STORAGE CONTAINERIZED WASTE



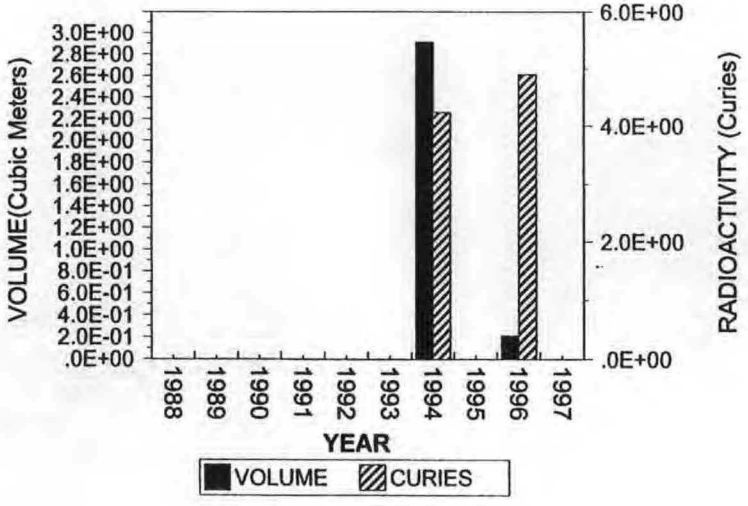
ANLW 1988 - 1997 ILTSF CONTAINERIZED STORAGE WASTE



BET 1988 - 1997 ILTSF CONTAINERIZED STORAGE WASTE



TRA 1988 - 1997 ILTSF CONTAINERIZED STORAGE WASTE



Graph: G22LB01

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INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY

TSA WASTE

AREA / YEAR	1952-1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
ANLE												
VOLUME	1471											1,471
CURIES	8253											8,253
ANLW												
VOLUME	26	4	6	1	<1	<1				23	8	70
CURIES	634	59	126	23	<1	<1				<1	<1	842
ARA												
VOLUME	10											10
CURIES	21											21
BCL												
VOLUME	214											214
CURIES	180											180
BEN												
VOLUME	<1											0
CURIES	19											19
BET												
VOLUME	433											433
CURIES	984											984
CF												
VOLUME	<1											0
CURIES	<1											0
CPP												
VOLUME	43											43
CURIES	342											342
CTF												
VOLUME	<1											0
CURIES	1											1
D+D												
VOLUME				<1								0
CURIES				3								3

1 VOLUMES IN CUBIC METERS
2 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

SS22MB01
Run Date: 05/18/1998

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY

TSA WASTE

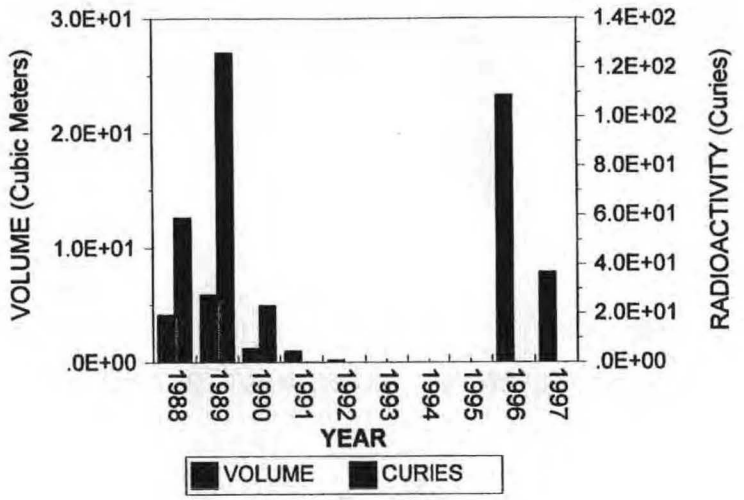
AREA / YEAR		1952-1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
MRC													
	VOLUME	3744	87										3,831
	CURIES	67869	1527										69,396
NRF													
	VOLUME	3			<1								4
	CURIES	331			8								339
RFO													
	VOLUME	52451	977	867									54,294
	CURIES	372353	9026	6497									387,875
TAN													
	VOLUME	<1								<1			1
	CURIES	16								3			19
TRA													
	VOLUME	8			2					<1			10
	CURIES	1980			49					<1			2,030
WMF													
	VOLUME	4415											4,415
	CURIES	19823											19,823
TOTAL	VOLUME	62820	1068	873	4	<1	<1			<1	23	8	64,798
	CURIES	472806	10612	6623	83	<1	<1			4	<1	<1	490,127

1 VOLUMES IN CUBIC METERS
2 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

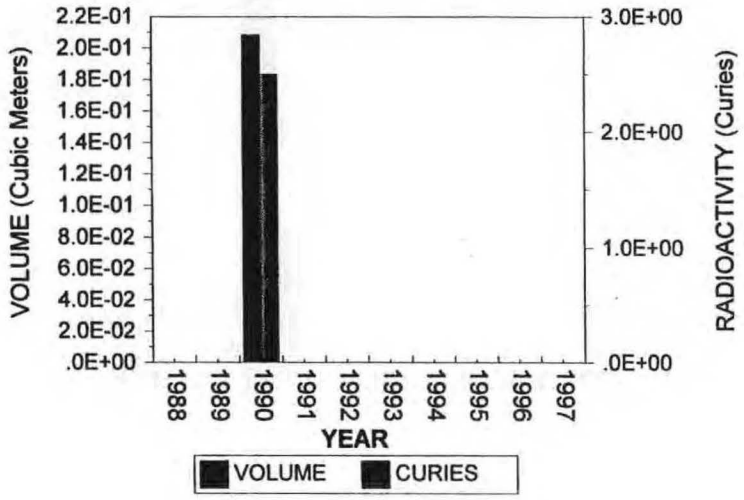
SS22MB01
Run Date: 05/18/1998

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY TSA WASTE

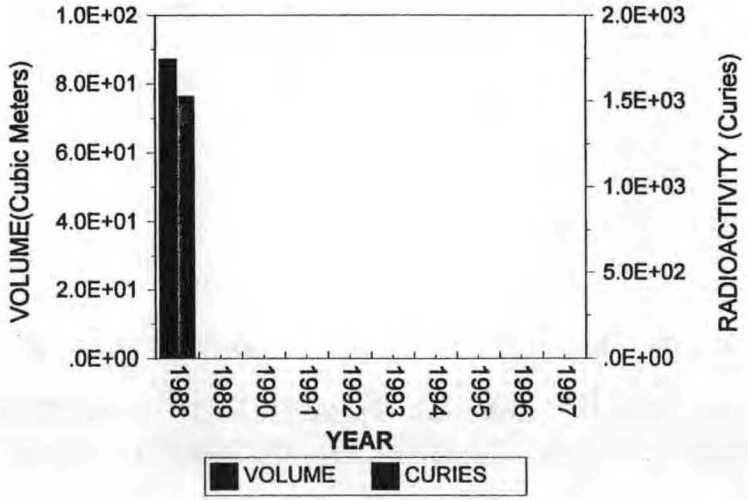
ANLW 1988 - 1997 TSA CONTAINERIZED STORAGE WASTE



D&D 1988 - 1997 TSA CONTAINERIZED STORAGE WASTE



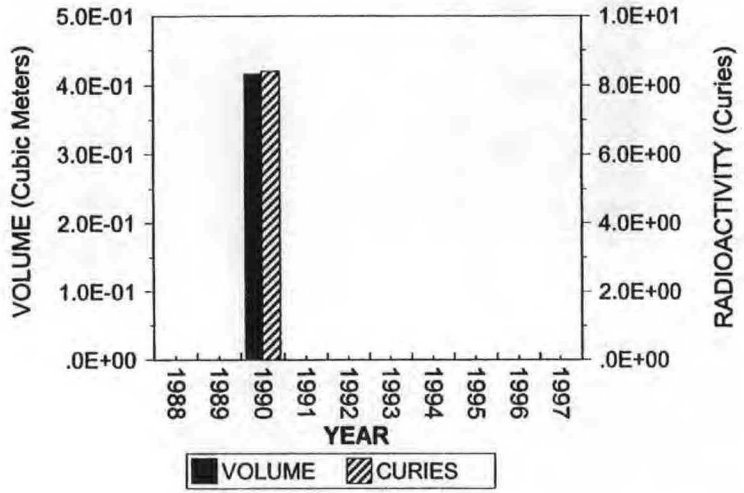
MRC 1988 - 1997 TSA CONTAINERIZED STORAGE WASTE



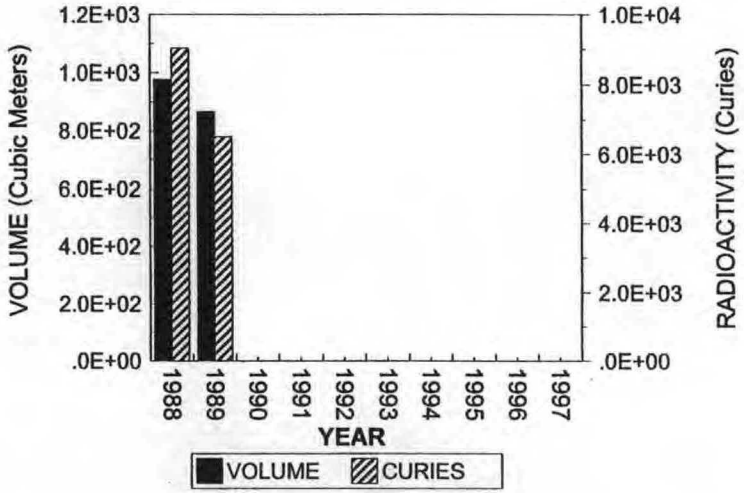
Graph: G22MB01

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY
TRANSURANIC STORAGE AREA (TSA) WASTE

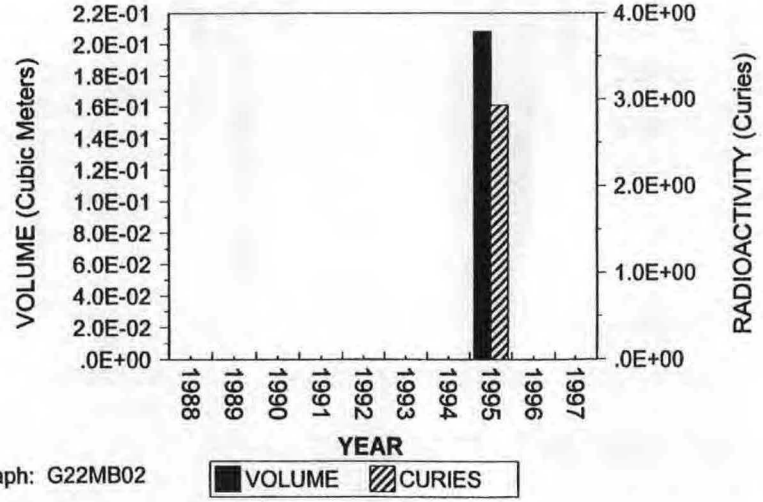
NRF 1988 - 1997 TSA STORAGE CONTAINERIZED WASTE



RFO 1988 - 1997 TSA STORAGE CONTAINERIZED WASTE

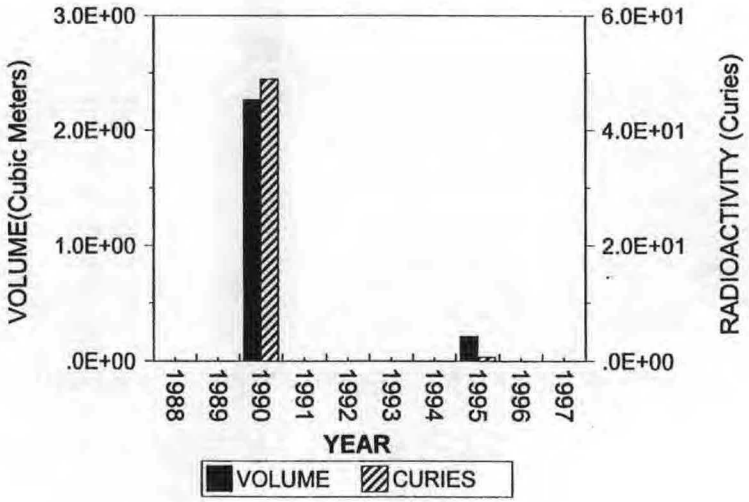


TAN 1988 - 1997 TSA STORAGE CONTAINERIZED WASTE



Graph: G22MB02

TRA 1988 - 1997 TSA STORAGE CONTAINERIZED WASTE



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U.S. Department of Energy
Integrated Waste Tracking System

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY

WERF WASTE

AREA / YEAR	1954- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
ANLW												
VOLUME	236	231	221	150	106	81				380	469	1,875
CURIES	<1	<1	<1	<1	<1	<1				8	9	20
ARA												
VOLUME	7	21										28
CURIES	<1	<1										0
CF												
VOLUME	283	66	37	74	<1	3	20	91	18		89	681
CURIES	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	0
CPP												
VOLUME	2238	1005	1061	1341	814	77	401		198	425	465	8,026
CURIES	6	4	3	7	3	<1	2		2	<1	<1	28
CTF												
VOLUME	91											91
CURIES	<1											0
D+D												
VOLUME	403		2	4	103	5	93	115	123	36	157	1,042
CURIES	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	1
ISU												
VOLUME										<1		0
CURIES										<1		0
LOF												
VOLUME	77											77
CURIES	<1											0
NRF												
VOLUME	1112	1119	671	920	477	343	503	266	418	355	960	7,144
CURIES	1	2	2	4	7	2	2	1	2	3	3	29
PBF												
VOLUME	39	6	16	16		1	23			18	91	211
CURIES	<1	<1	<1	<1		<1	<1			<1	<1	0
PER												
VOLUME	7											7
CURIES	<1											0

1 VOLUME IN CUBIC METERS
2 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

SS22PB01
Run Date: 05/12/1998

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL CONTAINERIZED RECORD-TO-DATE SUMMARY

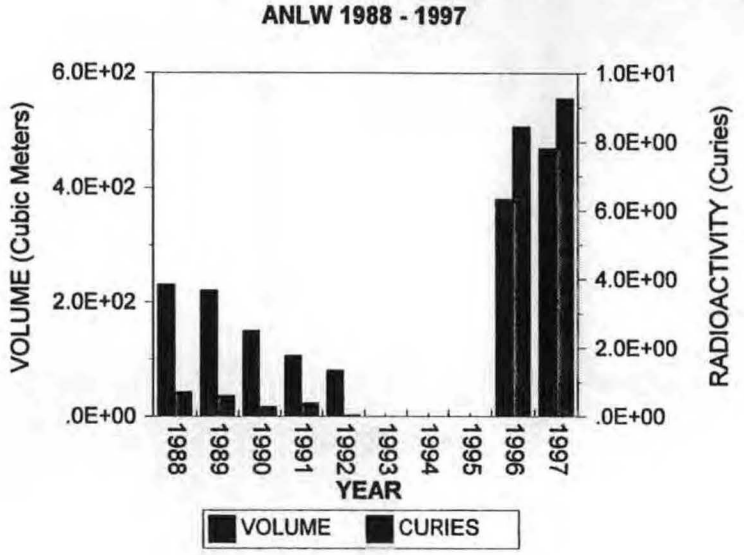
WERF WASTE

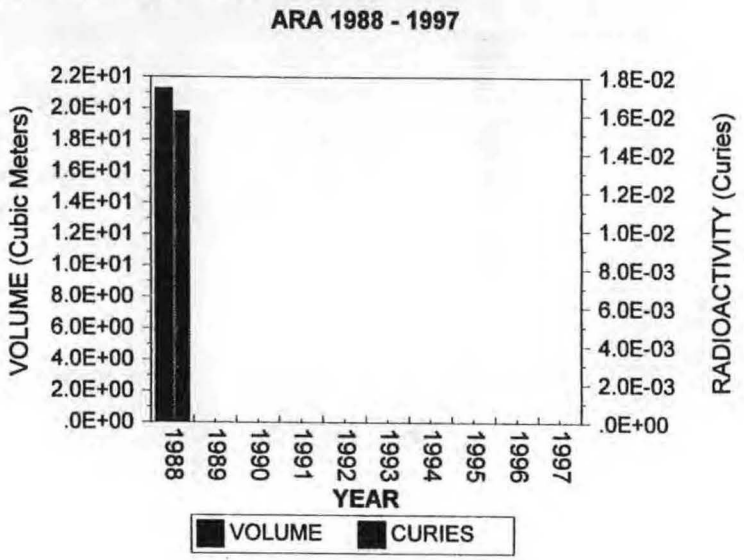
AREA / YEAR		1954- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
SMC													
	VOLUME	168	178	225	186	181			310		110	1015	2,373
	CURIES	<1	<1	<1	<1	<1			<1		<1	<1	1
TAN													
	VOLUME	778	92	104	49	37				25	32	386	1,504
	CURIES	<1	<1	<1	<1	<1				<1	<1	1	2
TRA													
	VOLUME	893	244	290	227	147	366	11		482	275	637	3,572
	CURIES	<1	<1	<1	<1	5	10	<1		<1	<1	7	23
WAG3													
	VOLUME											<1	0
	CURIES											<1	0
WERF													
	VOLUME							19			193	974	1,186
	CURIES							<1			<1	6	7
WMF													
	VOLUME	6			6	6					192	220	431
	CURIES	<1			<1	<1					<1	<1	0
WROC													
	VOLUME							4			<1	62	67
	CURIES							<1			<1	<1	0
TOTAL	VOLUME	6340	2962	2627	2973	1872	876	1073	782	1266	2018	5526	28,315
	CURIES	9	6	6	12	15	12	4	1	4	13	28	111

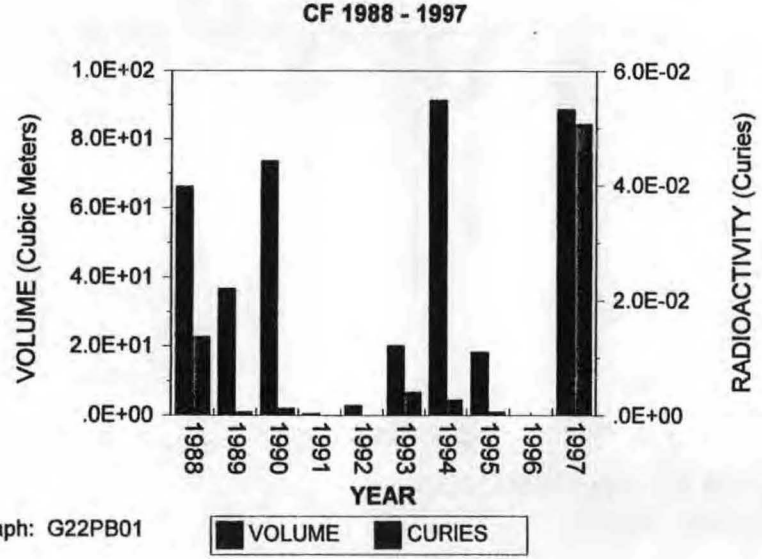
1 VOLUME IN CUBIC METERS
2 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

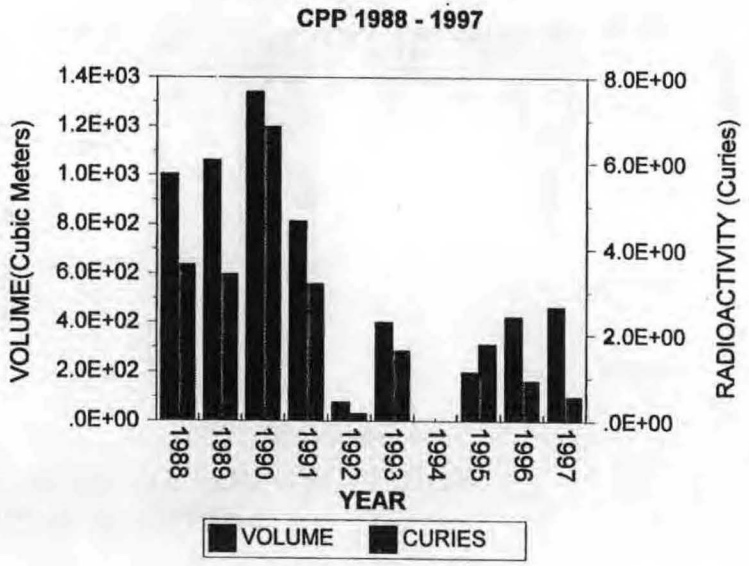
SS22PB01
Run Date: 05/12/1998

INEEL RECORD-TO-DATE SUMMARY
CONTAINERIZED WASTE SENT TO WERF FOR REDUCTION



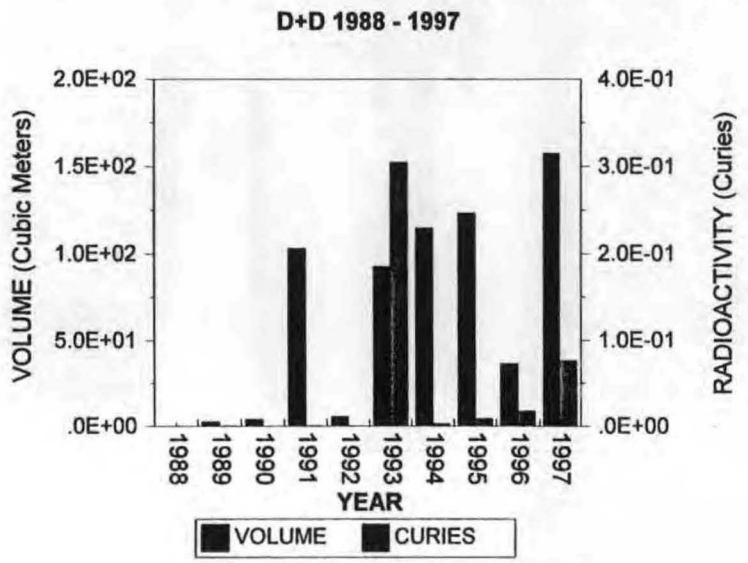


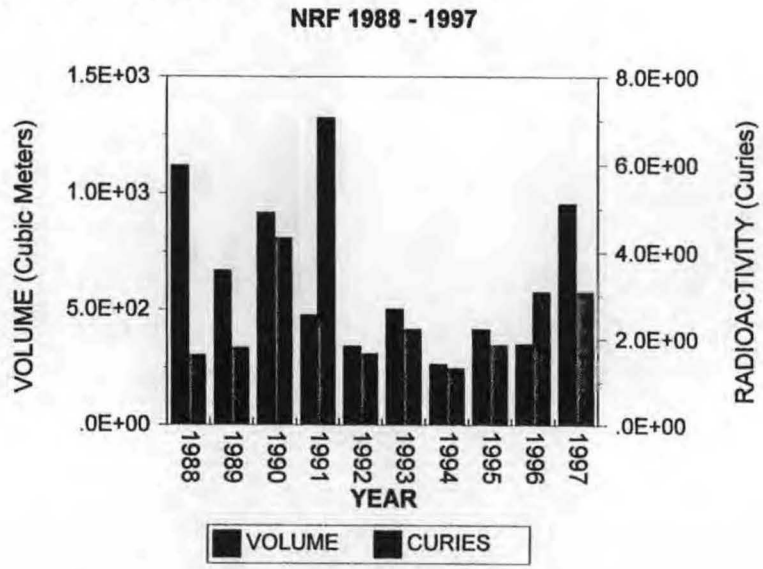


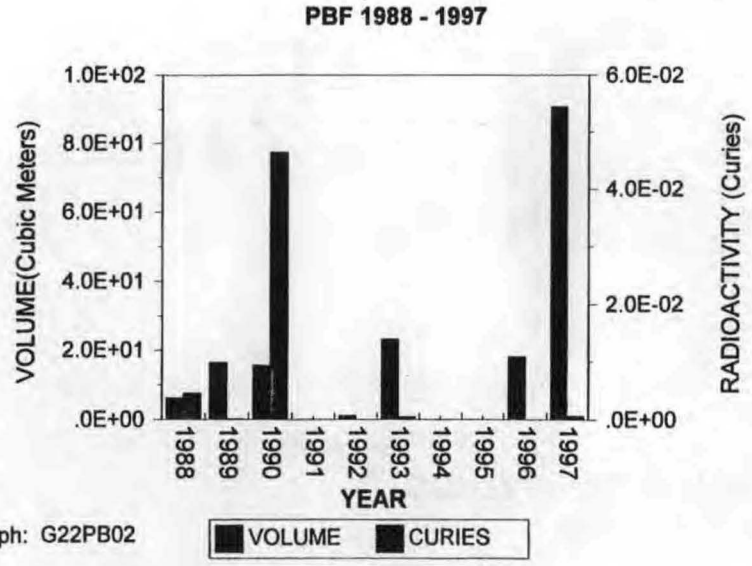


Graph: G22PB01

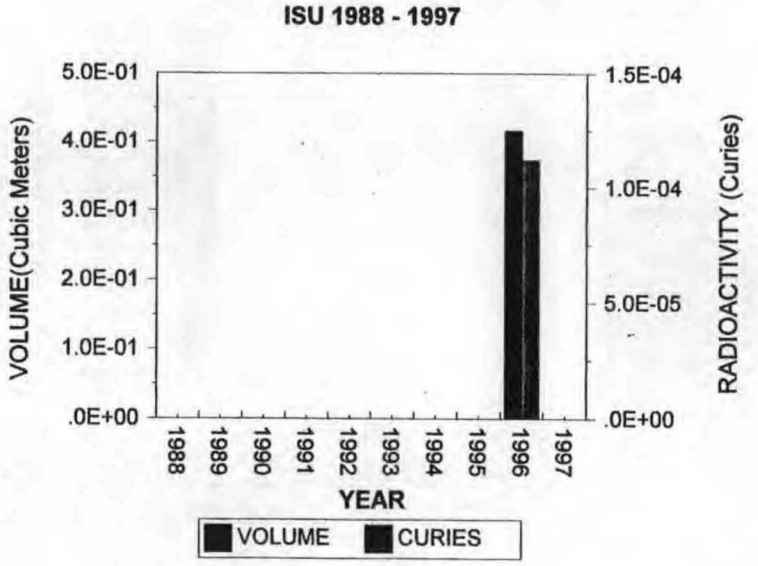
INEEL RECORD-TO-DATE SUMMARY
CONTAINERIZED WASTE SENT TO WERF FOR REDUCTION





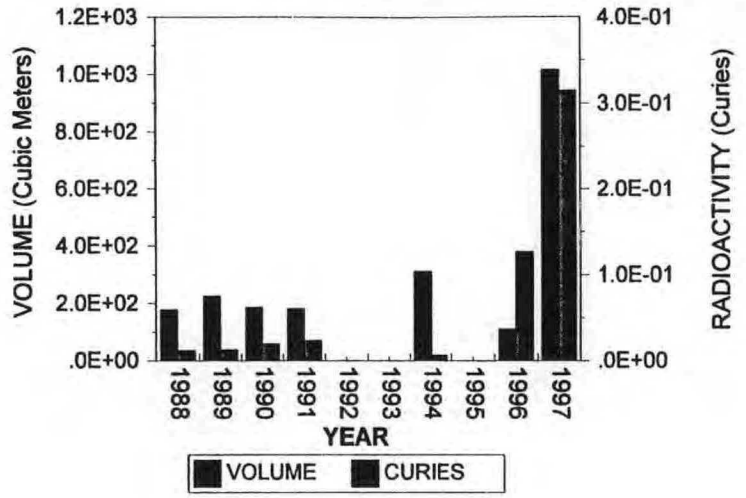


Graph: G22PB02

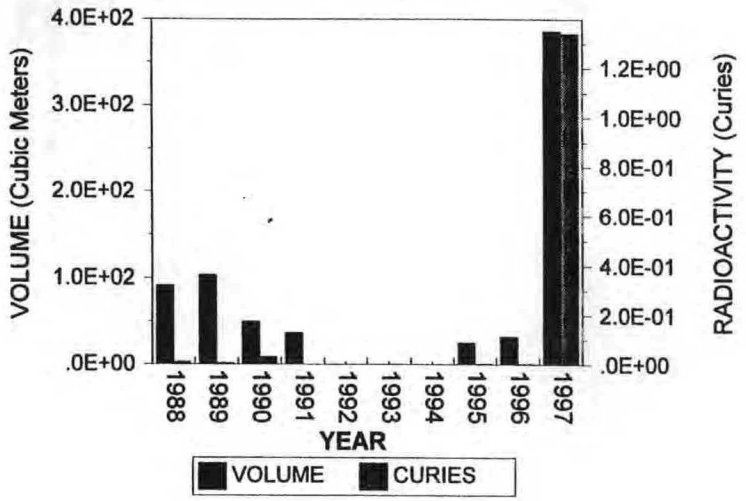


INEEL RECORD-TO-DATE SUMMARY
CONTAINERIZED WASTE SENT TO WERF FOR REDUCTION

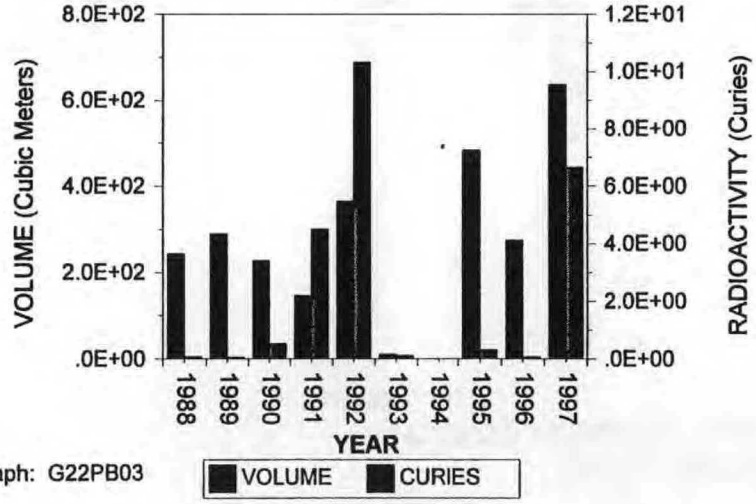
SMC 1988 - 1997



TAN 1988 - 1997

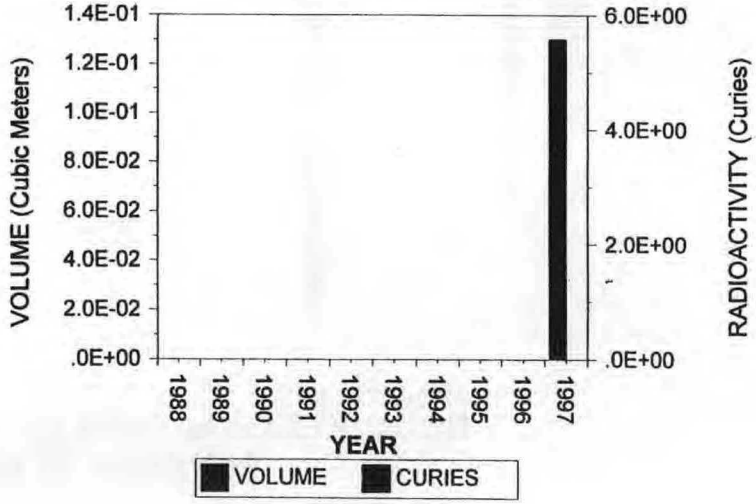


TRA 1988 - 1997



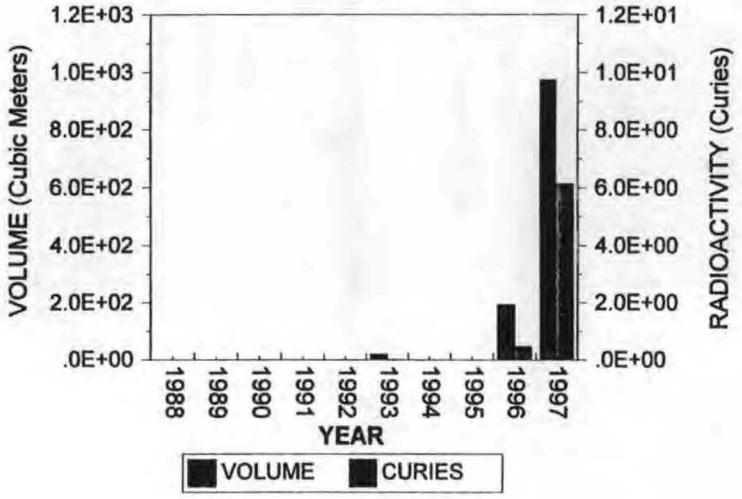
Graph: G22PB03

WAG3 1988 - 1997

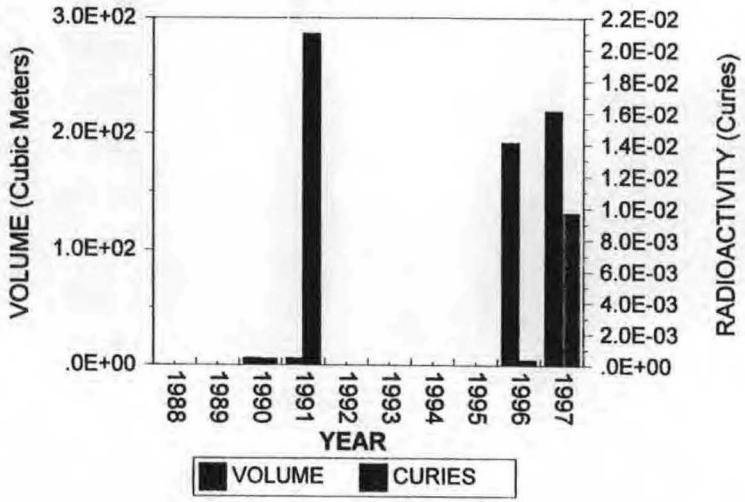


INEEL RECORD-TO-DATE SUMMARY
CONTAINERIZED WASTE SENT TO WERF FOR REDUCTION

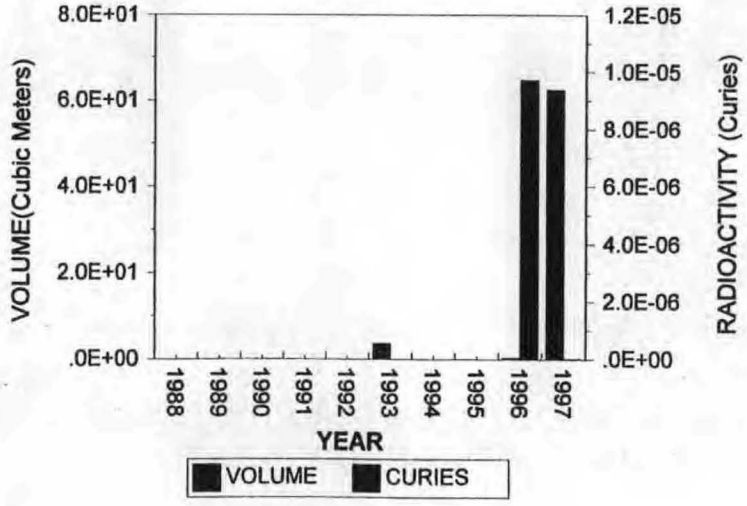
WERF 1988 - 1997



WMF 1988 - 1997



WROC 1988 - 1997



Graph: G22PB04

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Integrated Waste Tracking System

INEEL RECORD-TO-DATE SUMMARY

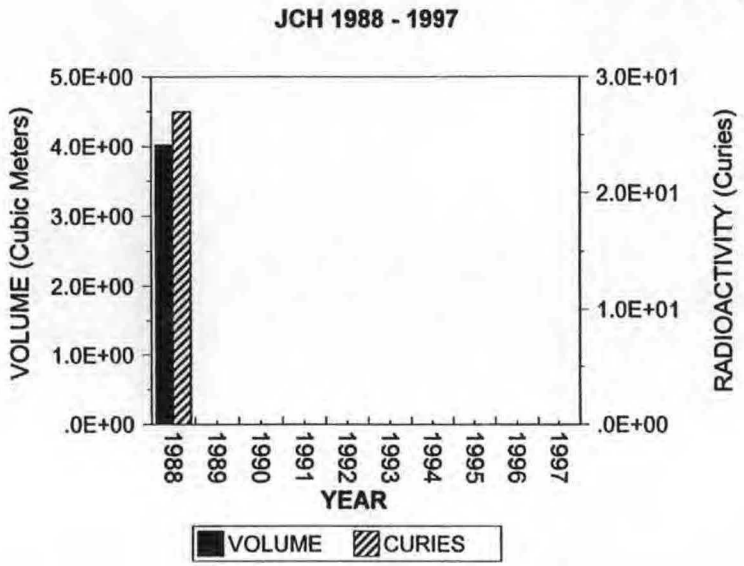
SCND WASTE

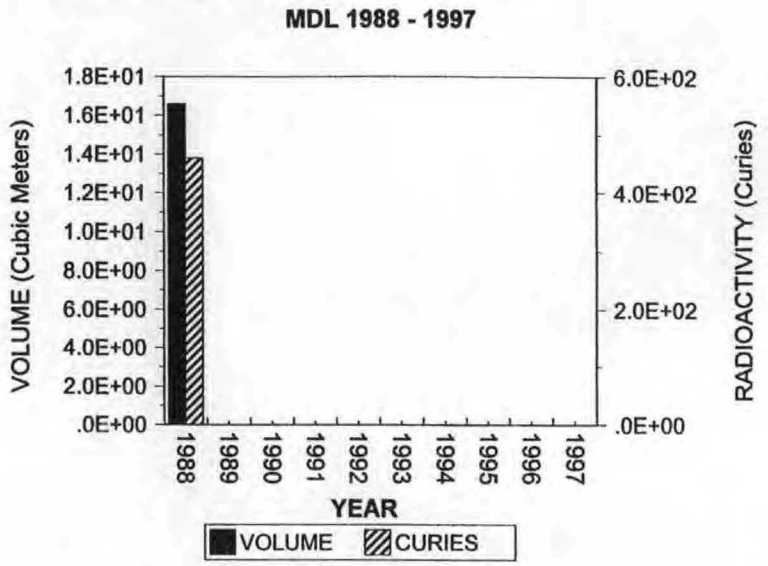
AREA / YEAR		1952- 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
	VOLUME												
	CURIES												
B+W													
	VOLUME	4											4
	CURIES	46											46
JCH													
	VOLUME		4										4
	CURIES		27										27
MDL													
	VOLUME		17										17
	CURIES		460										460
TAN													
	VOLUME										2		2
	CURIES										4566		4566
TOTAL	VOLUME	4	21								2		27
	CURIES	46	487								4566		5,100

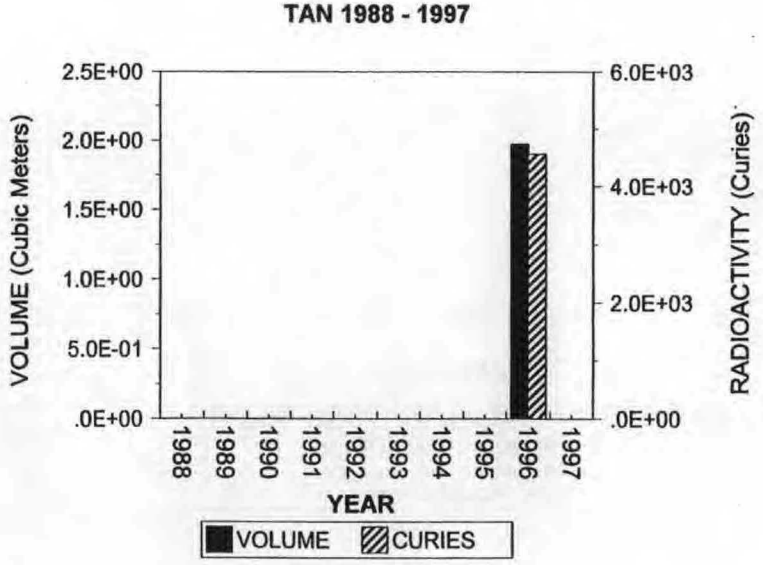
INEEL-41

1 VOLUME IN CUBIC METERS
2 DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING
3 THIS IS A SUMMARY OF SCND WASTE NOT PERVIOUSLY REPORTED

INEEL RECORD-TO-DATE SUMMARY
SCND WASTE STORED AT THE INEEL







Graph: G22ZB01

INEEL 1997 Year-to-Date Summary

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL YEAR TO DATE SUMMARY

FOR JAN THROUGH DEC 1997

FACILITY	1.AIRBORNE VOLUME (CU. METERS)	1.AIRBORNE RADIO-ACTIVITY (CURIES)	2.LIQUID VOLUME (CU. METERS)	2.LIQUID RADIO-ACTIVITY (CURIES)	3.CONTAINERIZED VOLUME (CU. METERS)	3.CONTAINERIZED RADIO-ACTIVITY (CURIES)
DISPOSED WASTES						
ANLW	2.408E+09	3.606E+03			2.285E+02	9.880E+00
CPP	2.585E+09	1.320E+02	2.316E+09	2.405E-02	1.505E+02	1.374E+00
D+D					1.413E+02	6.332E-01
NRF	3.769E+09	8.757E-01			3.472E+02	1.171E+04
PBF	5.969E+07	2.077E-07			2.537E+01	8.459E-02
SMC	3.560E+09	4.701E-05				
TAN	1.375E+08	7.117E-07			1.453E+02	2.488E+00
TRA	1.386E+09	1.588E+03	1.953E+07	9.977E+01	2.924E+01	4.214E+03
WAG1					8.328E-01	3.245E-04
WAG3					1.022E+00	5.054E-04
WERF	2.830E+08	6.269E-03			4.893E+02	1.861E+01
DISPOSED WASTES SUBTOTAL	1.419E+10	5.327E+03	2.336E+09	9.980E+01	1.559E+03	1.595E+04

INEEL-45

1 * Solid values for WERF are for waste disposed at RWMC and are end products of WERF reduction processes.

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Integrated Waste Tracking System

INEEL YEAR TO DATE SUMMARY

FOR JAN THROUGH DEC 1997

Low Level Waste

FACILITY	VOLUME (CU. METERS)	RADIO-ACTIVITY CURIES
STORED WASTES		
ANLW WASTE FROM:		
TAN	1.812E+00	1.009E-01
	1.812E+00	1.009E-01
CPP WASTE FROM:		
CPP	1.057E+03	4.768E+00
TRA	4.978E+01	4.868E-03
	1.107E+03	4.773E+00
PBF WASTE FROM:		
TAN	2.082E-01	3.069E-06
	2.082E-01	3.069E-06
TAN WASTE FROM:		
TAN	5.056E+02	2.393E-02
	5.056E+02	2.393E-02
STORED WASTES SUBTOTAL	1.615E+03	4.898E+00

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

INEEL YEAR TO DATE SUMMARY

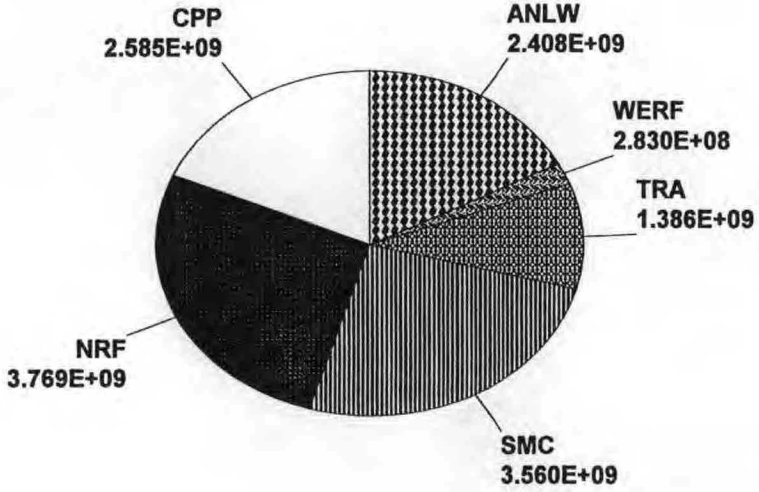
FOR JAN THROUGH DEC 1997

CONTAINERIZED

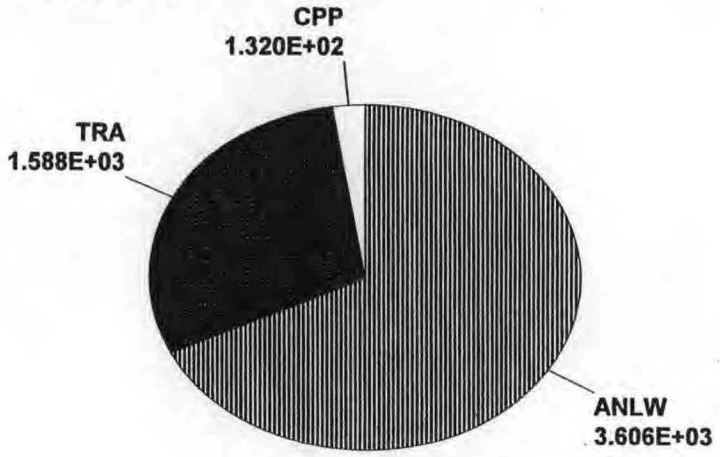
FACILITY	VOLUME (CU. METERS)	RADIO-ACTIVITY (CURIES)
WASTES TO BE PROCESSED AT WERF FROM:		
ANLW	4.693E+02	9.276E+00
CF	8.880E+01	5.070E-02
CPP	4.651E+02	5.714E-01
D+D	1.574E+02	7.626E-02
NRF	9.605E+02	3.090E+00
PBF	9.084E+01	6.175E-04
SMC	1.015E+03	3.149E-01
TAN	3.858E+02	1.341E+00
TRA	6.369E+02	6.652E+00
WAG3	1.303E-01	3.375E-06
WERF	9.739E+02	6.137E+00
WMF	2.197E+02	9.705E-03
WROC	6.247E+01	2.869E-08
WERF WASTES SUBTOTAL	5.526E+03	2.752E+01

INEEL YEAR-TO-DATE SUMMARY CY 1997

INEEL AIRBORNE EMISSIONS

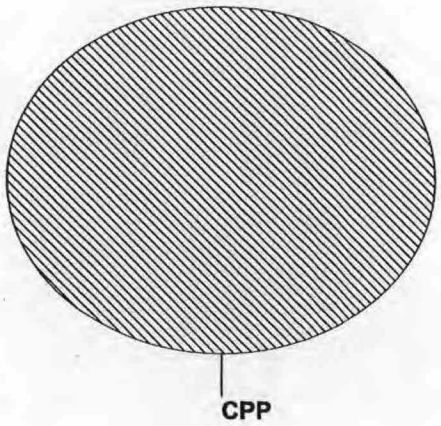


Volume (Cubic Meters)
Areas not listed have values <1% of the total

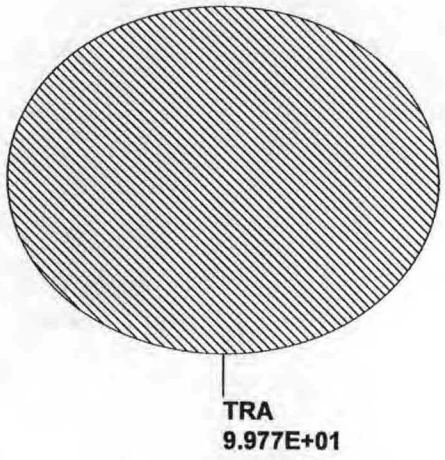


Radioactivity (Curies)
Areas not listed have values <1% of the total

INEEL LIQUID EFFLUENT



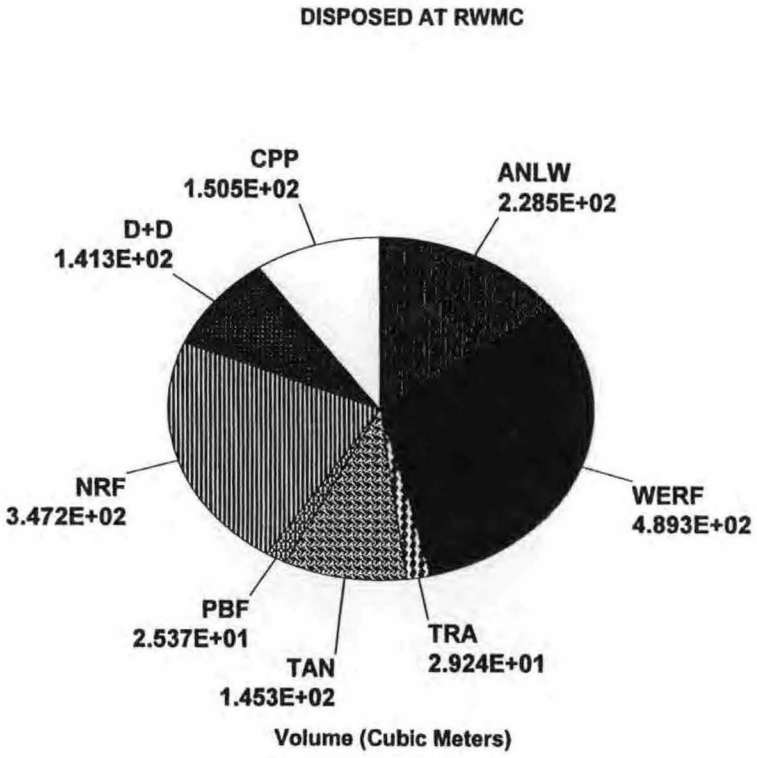
Volume (Liters)
Areas not listed have values <1% of the total

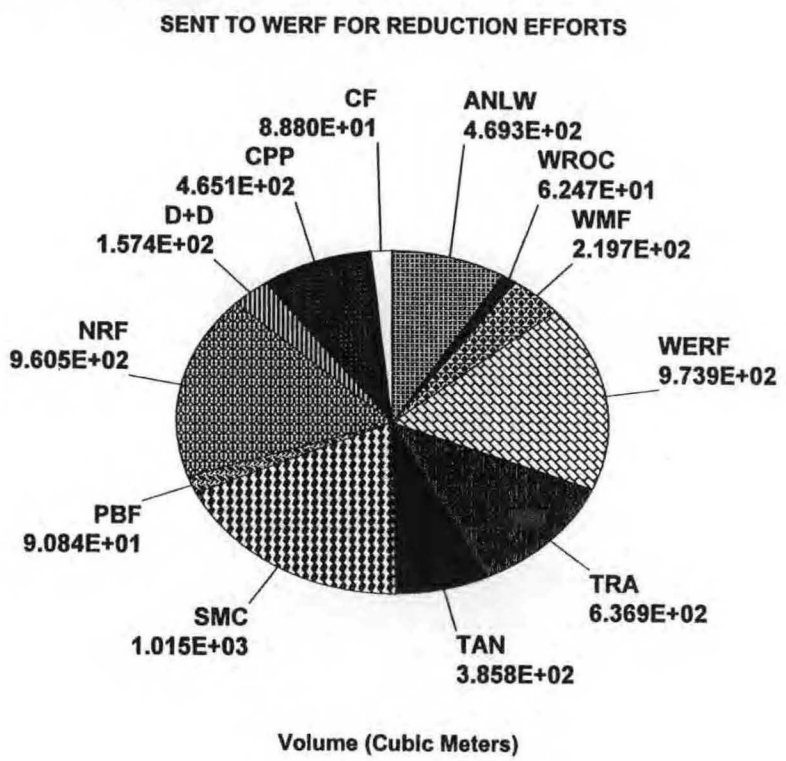


Radioactivity (Curies)
Areas not listed have values <1% of the total

Graph: G009B01

INEEL CONTAINERIZED WASTE VOLUME (Cubic Meters) DISPOSED AT RWMC AND SENT FOR REDUCTION EFFORTS





Areas not listed have values <1% of the total

Graph: G009B02

Nuclide Summary in Curies for Airborne, Liquid, and Solid Waste

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

AIRBORNE
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

NUCLIDE / GEN AREA IDENT	ANLW	CPP	NRF	PBF	SMC	TAN	TRA	WERF	TOTAL
AM-243								<1	<1
AR-41	4						1552		1556
BA-139							<1		<1
C-14			<1					<1	<1
CO-58			<1				<1		<1
CO-60		<1		<1		<1	<1		<1
CR-51							<1		<1
CS-134		<1					<1		<1
CS-137		<1				<1	<1		<1
CS-138							<1		<1
EU-154		<1							<1
GD-153							<1		<1
GROS-BET-GAM	<1								<1
GROSS-ALPHA	<1		<1	<1		<1	<1		<1
GROSS-BETA			<1	<1		<1	<1		<1
H-3	22	132	<1					<1	154
HG-203			<1				<1		<1
I-129		<1						<1	<1
I-131			<1				<1		<1
I-133							<1		<1
KR-85	3579								3579
KR-85M							3		3
KR-87							2		2
KR-88							4		4
NA-24							<1		<1
OS-191			<1						<1
PA-234					<1				<1
PU-238		<1						<1	<1
PU-239		<1							<1

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Integrated Waste Tracking System

LIQUID
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

NUCLIDE / GEN AREA IDENT	CPP	TRA	TOTAL
CE-144		<1	<1
CO-58		<1	<1
CO-60		<1	<1
CR-51		2	2
CS-137		<1	<1
FE-59		<1	<1
GROSS-BETA		<1	<1
H-3		96	96
HF-175		<1	<1
HF-181		<1	<1
MN-54		<1	<1
NA-24		<1	<1
NB-95		<1	<1
PU-239	<1		<1
RU-103		<1	<1
SC-46		<1	<1
SR-89		<1	<1
SR-90	<1	<1	<1
TA-182		<1	<1
Y-90		<1	<1
ZN-65		<1	<1
ZR-95		<1	<1
TOTAL	<1	100	100

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

DISPOSED SOLID WASTE
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

NUCLIDE / GEN AREA IDENT	ANLW	CPP	D+D	NRF	PBF	TAN	TRA	WAG1	WAG3	WERF	TOTAL
CR-51				<1		<1	23			<1	23
CS-134	<1	<1	<1	<1		<1	<1			<1	<1
CS-135										<1	<1
CS-137	<1	<1	<1	<1	<1	2	<1	<1	<1	1	6
EU-152	<1	<1	<1	<1			<1			<1	<1
EU-154	<1	<1	<1	5		<1	<1		<1	<1	5
EU-155	<1	<1	<1	2		<1	<1		<1	<1	2
FE-55	3	<1	<1	2192	<1	<1	5			6	2206
FE-59		<1		<1						<1	<1
GD-153				<1			<1			<1	<1
H-3	<1	<1	<1	1			4173			2	4176
HF-175				<1			<1			<1	<1
HF-181				<1		<1	<1			<1	<1
I-129			<1	<1		<1	<1			<1	<1
I-131										<1	<1
IN-113M				<1						<1	<1
IR-192				<1						<1	<1
K-40										<1	<1
KR-85				<1			<1			<1	<1
KR-95							<1				<1
LA-140										<1	<1
MN-54	<1	<1		1		<1	<1			2	4
MO-93	<1			<1						<1	<1
MO-99										<1	<1
NA-22	<1									<1	<1
NA-24							<1				<1
NB-93M				<1						<1	<1

Idaho Operations Office
U.S. Department of Energy
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DISPOSED SOLID WASTE
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

NUCLIDE / GEN AREA IDENT	ANLW	CPP	D+D	NRF	PBF	TAN	TRA	WAG1	WAG3	WERF	TOTAL
RA-224										<1	<1
RA-226			<1							<1	<1
RA-228										<1	<1
RH-106	<1			<1						<1	<1
RN-220										<1	<1
RN-222										<1	<1
RU-103							<1			<1	<1
RU-106	<1			<1		<1	<1			<1	<1
S-35				<1							<1
SB-124				<1			<1			<1	<1
SB-125	<1	<1		78		<1	<1		<1	<1	78
SC-46				<1			<1			<1	<1
SE-75				<1			<1				<1
SM-145				<1							<1
SM-151	<1			<1						<1	<1
SN-113				<1						<1	<1
SN-119M				53						<1	53
SN-121M				<1							<1
SN-123	<1			<1						<1	<1
SN-126										<1	<1
SR-85										<1	<1
SR-89				<1							<1
SR-90	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	3
TA-182	<1			48			<1			<1	49
TC-99	<1		<1	<1	<1	<1	<1		<1	<1	<1
TE-123M				<1							<1
TE-125	<1										<1

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TRANSURANIC STORAGE AREA
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

NUCLIDE IDENT	ANLW	TOTAL
AM-241	<1	<1
PU-238	<1	<1
PU-239	<1	<1
PU-240	<1	<1
PU-241	<1	<1
PU-242	<1	<1
U-235	<1	<1
TOTAL	<1	<1

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SS18CN01
Run Date: 05/12/1998

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

ANLW
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

IDENT	ANLW	TAN	TOTAL
SN-123		<1	<1
SR-85	<1		<1
SR-90	<1	<1	<1
TC-99		<1	<1
TE-127M		<1	<1
Y-90	<1	<1	<1
ZR-93		<1	<1
ZR-95		<1	<1
TOTAL	124	<1	124

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U.S. Department of Energy
Integrated Waste Tracking System

CPP
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

IDENT	CPP	TRA	TOTAL
RB-87	<1	<1	<1
RU-106	<1	<1	<1
SB-125	<1	<1	<1
SE-79	<1	<1	<1
SM-147	<1	<1	<1
SM-151	<1	<1	<1
SN-121M	<1	<1	<1
SN-126	<1	<1	<1
SR-90	2	<1	2
TC-99	<1	<1	<1
TH-228	<1	<1	<1
TH-230	<1	<1	<1
U-232	<1	<1	<1
U-234	<1	<1	<1
U-235	<1	<1	<1
U-236	<1	<1	<1
U-238	<1	<1	<1
Y-90	<1		<1
ZR-93	<1	<1	<1
ZR-95	<1		<1
TOTAL	5	<1	5

Idaho Operations Office
U.S. Department of Energy
Integrated Waste Tracking System

TAN
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

NUCLIDE IDENT	TAN	TOTAL
AM-241	<1	<1
BA-137	<1	<1
BA-137M	<1	<1
CO-60	<1	<1
CS-134	<1	<1
CS-137	<1	<1
EU-152	<1	<1
EU-154	<1	<1
FE-55	<1	<1
I-129	<1	<1
K-40	<1	<1
NI-63	<1	<1
RH-106	<1	<1
RU-106	<1	<1
SB-125	<1	<1
SR-90	<1	<1
TC-99	<1	<1
TH-232	<1	<1
Y-90	<1	<1
TOTAL	<1	<1

Idaho Operations Office
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Integrated Waste Tracking System

WERF
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

IDENT	ANLW	CF	NRF	SMC	TAN	TRA	WAG3	WERF	WMF	WROC	TOTAL
HE-3					<1						<1
HF-175			<1								<1
HF-181			<1			<1					<1
I-129			<1				<1				<1
IN-113M			<1								<1
K-40					<1	<1		<1			<1
KR-85			<1								<1
MN-54	<1		<1	<1	<1	<1		<1		<1	<1
MO-93	<1										<1
MO-99			<1								<1
NB-93M			<1								<1
NB-94			<1								<1
NB-95			<1					<1			<1
NI-59	<1	<1	<1					<1			<1
NI-63	<1	<1	<1		<1	<1		<1	<1		<1
NP-237							<1	<1			<1
NP-239								<1			<1
PA-233								<1			<1
PA-234				<1				<1			<1
PA-234M				<1				<1			<1
PB-210								<1			<1
PB-212								<1			<1
PB-214								<1			<1
PM-147	<1		<1					<1			<1
PO-210								<1			<1
PO-212								<1			<1
PO-214								<1			<1
PO-216								<1			<1
PO-218								<1			<1
PR-144	<1		<1	<1				<1			<1

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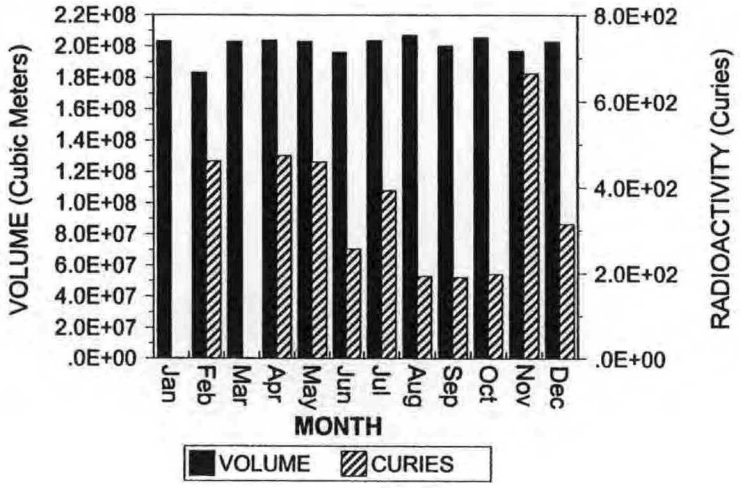
WERF
NUCLIDE SUMMARY IN CURIES
FOR JANUARY THROUGH DECEMBER 1997

IDENT	ANLW	CF	NRF	SMC	TAN	TRA	WAG3	WERF	WMF	WROC	TOTAL
U-234	<1			<1	<1		<1	<1	<1		<1
U-235	<1	<1		<1	<1			<1	<1		<1
U-236	<1							<1			<1
U-238	<1			<1	<1		<1	<1	<1		<1
Y-90	<1		<1	<1	<1	<1	<1	<1			<1
ZN-65				<1	<1	<1		<1			<1
ZR-95			<1					<1			<1
TOTAL	<1	<1	<1	<1	1	5	<1	1	<1	<1	8

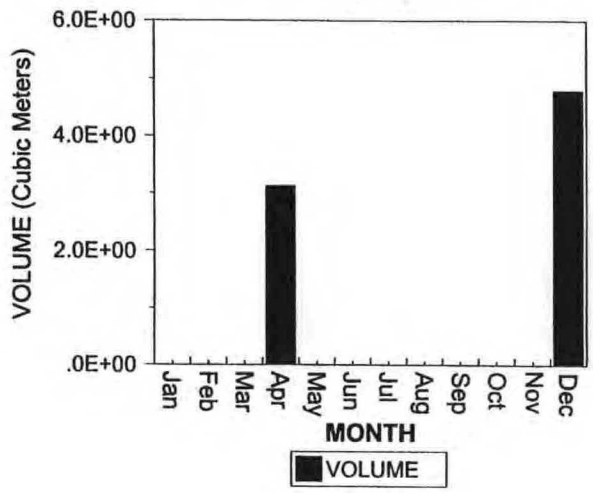
Argonne National Laboratory-West 1997 Detail Graphs

ARGONNE NATIONAL LABORATORY-WEST (ANLW) MONTHLY DETAILS
CY- 1997

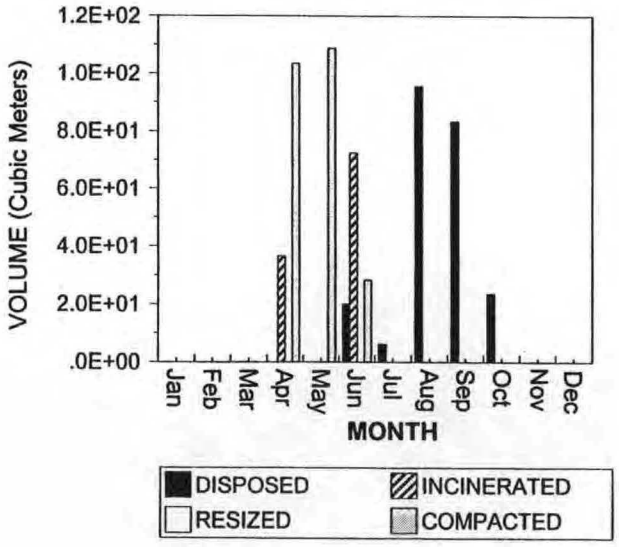
ANLW CY 1997 AIRBORNE EMISSION



ANLW CY 1997 TSA STORAGE AREA WASTE



ANLW CY 1997 SHIPPED LOW LEVEL WASTE

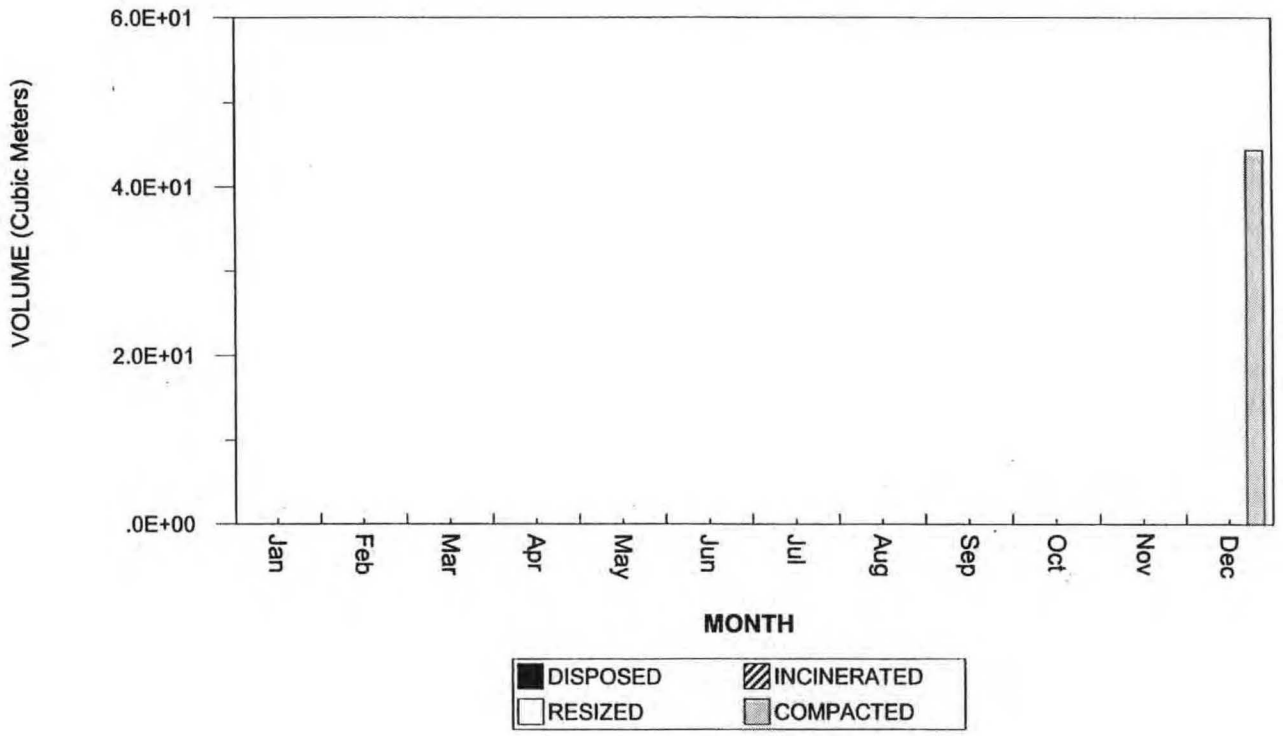


Graph: GAREAANL

Central Facilities 1997 Detail Graphs

CENTRAL FACILITY AREA (CF) MONTHLY DETAILS
CY-1997

CF CY 1997 SHIPPED LOW LEVEL WASTE

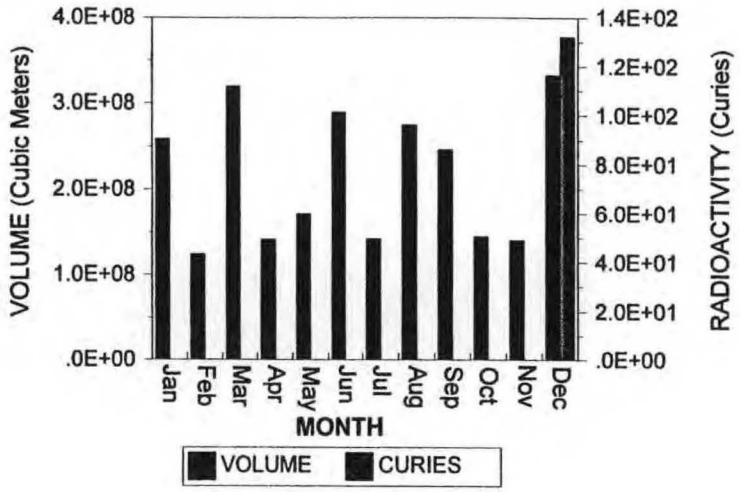


Graph: GAREACFA

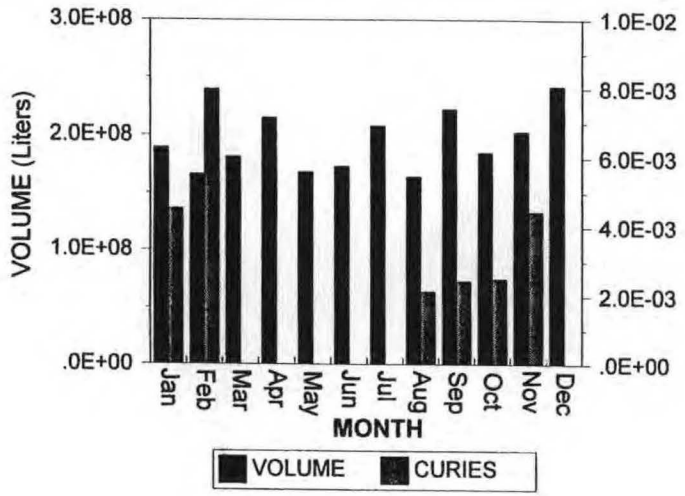
Chemical Processing Plant 1997 Detail Graphs

CHEMICAL PROCESSING PLANT (CPP) MONTHLY DETAILS
CY- 1997

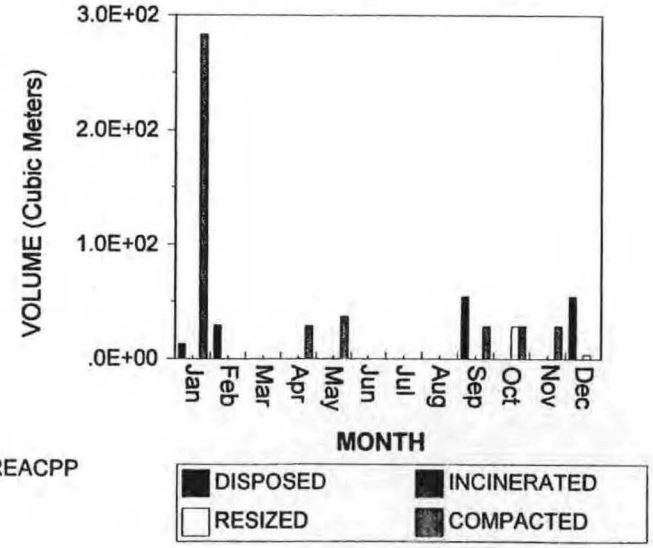
CPP CY 1997 AIRBORNE EMISSION



CPP CY 1997 LIQUID EFFLUENT

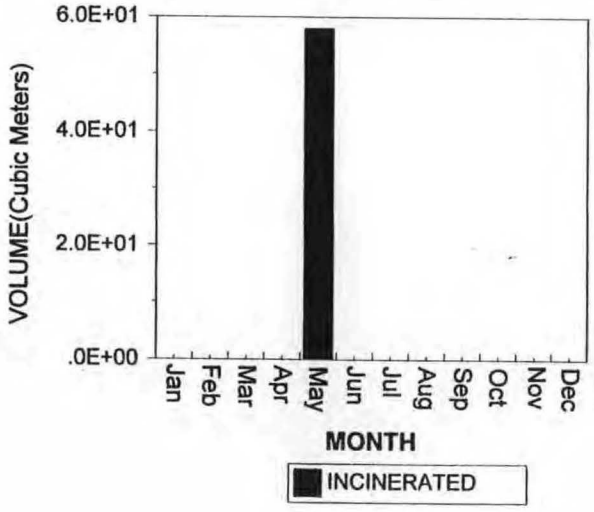


CPP CY 1997 SHIPPED LOW LEVEL WASTE



Graph: GAREACPP

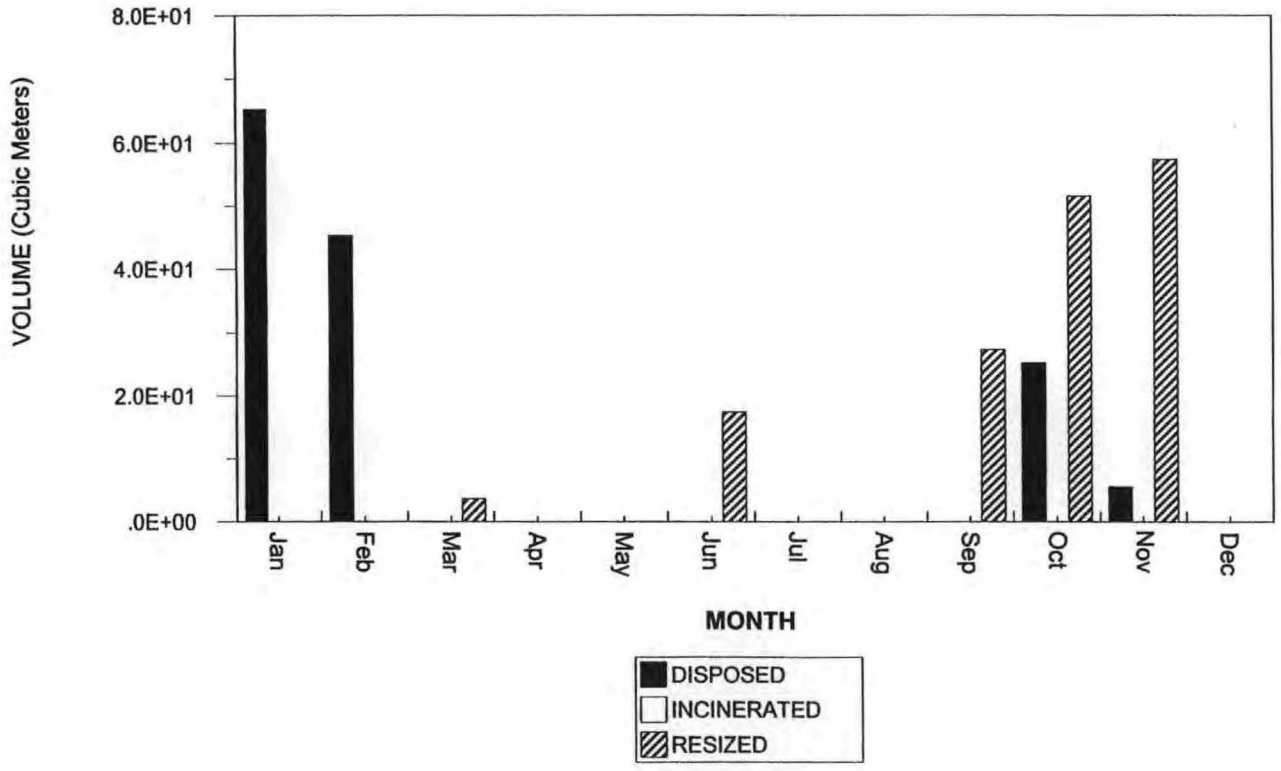
CPP CY 1997 INCINERABLE WASTE SHIPPED TO PRIVATE INDUSTRY



Decontamination and Decommissioning 1997 Detail Graphs

DECONTAMINATION AND DECOMMISSIONING MONTHLY DETAILS
CY-1997

D+D CY 1997 SHIPPED LOW LEVEL WASTE

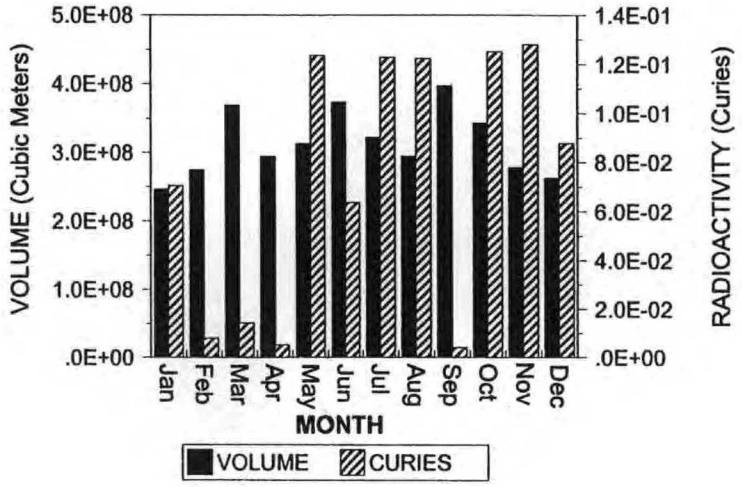


Graph: GAREAD+D

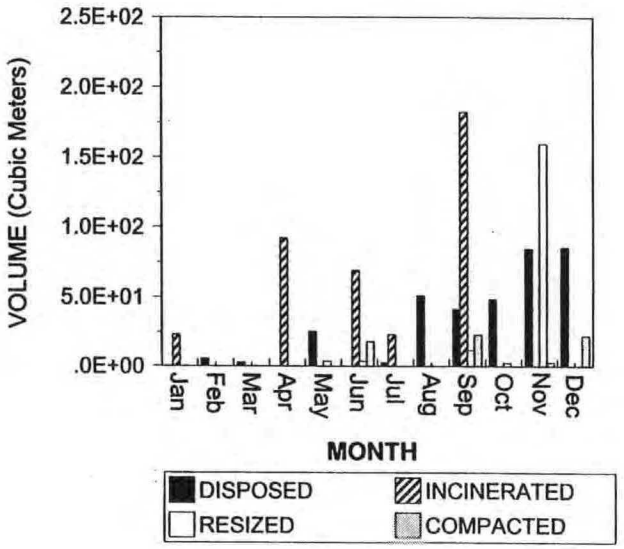
Naval Reactor Facility 1997 Detail Graphs

NAVAL REACTORS FACILITY (NRF) MONTHLY DETAILS
CY- 1997

NRF CY 1997 AIRBORNE EMISSION



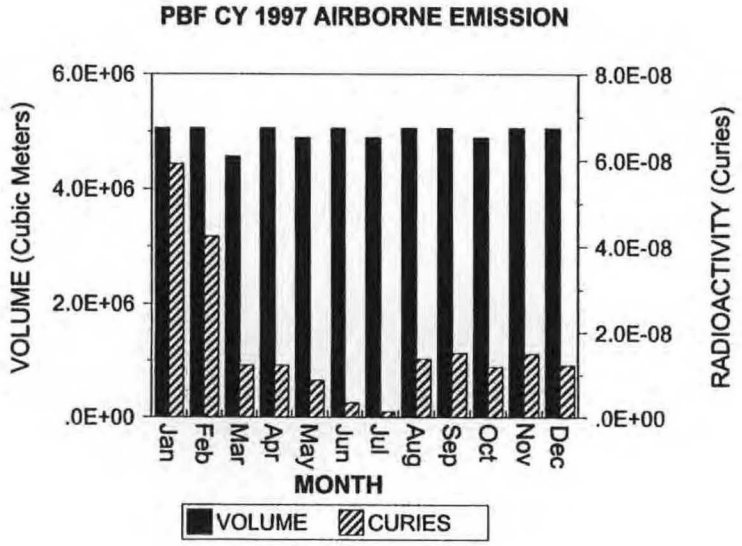
NRF CY 1997 SHIPPED LOW LEVEL WASTE

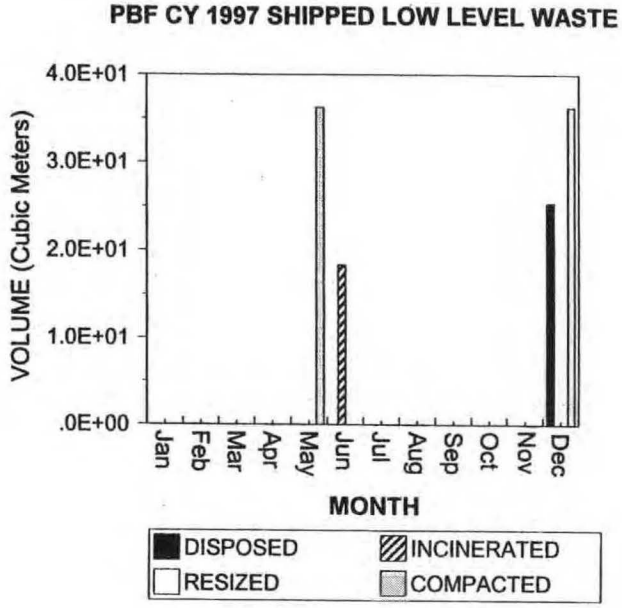


Graph: GAREANRF

Power Burst Facility 1997 Detail Graphs

POWER BURST FACILITY (PBF) MONTHLY DETAILS
CY- 1997

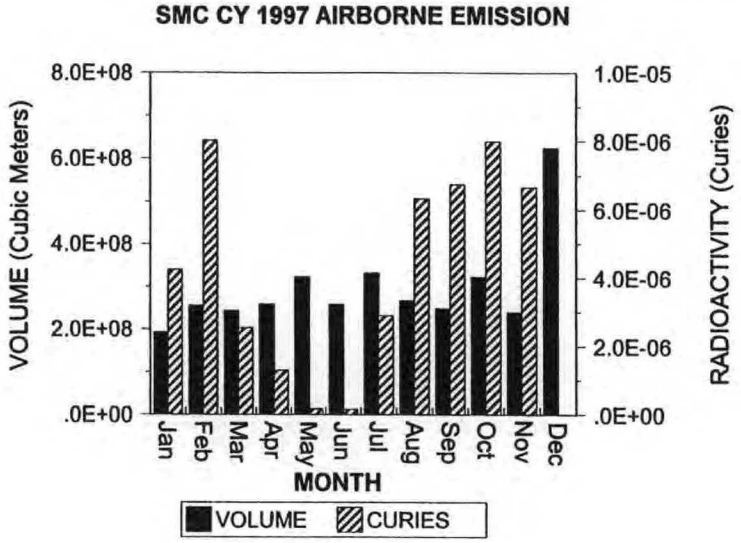


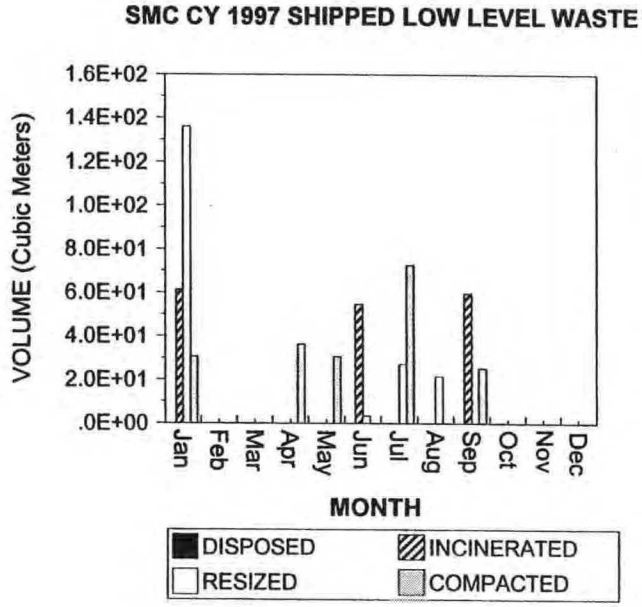


Graph: GAREAPBF

Special Manufacturing Capability 1997 Detail Graphs

SPECIAL MANUFACTURING CAPABILITY (SMC) MONTHLY DETAILS
CY- 1997

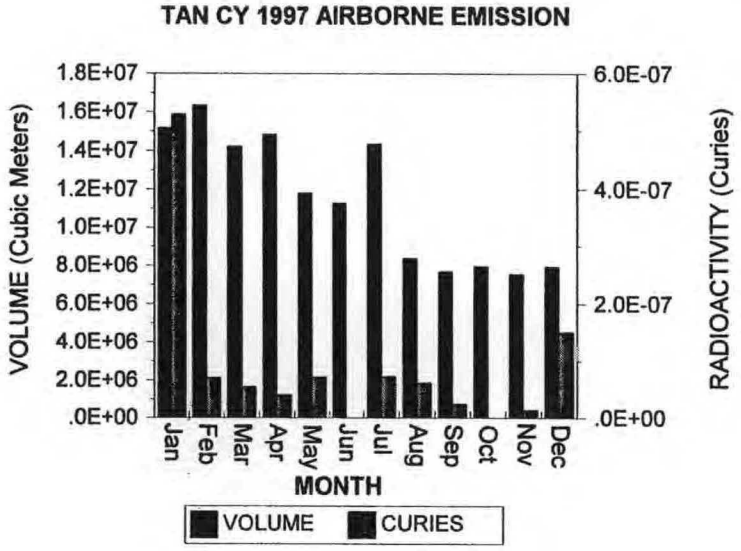


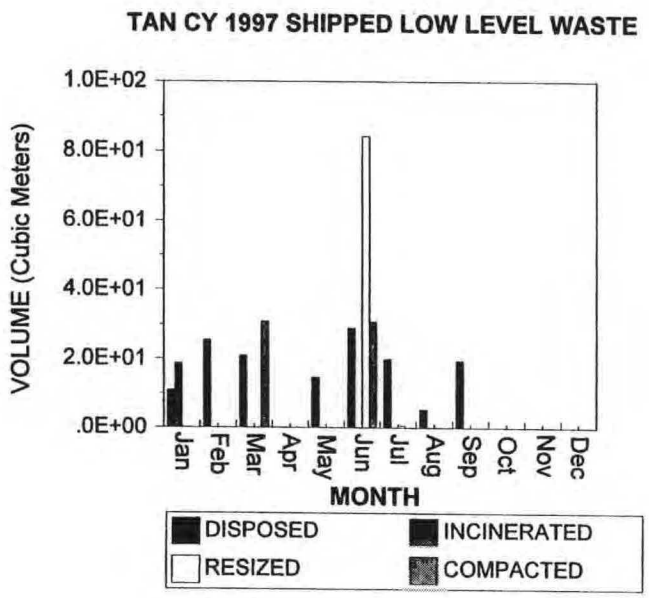


Graph: GAREASMC

Test Area North 1997 Detail Graphs

TEST AREA NORTH (TAN) MONTHLY DETAILS
CY- 1997

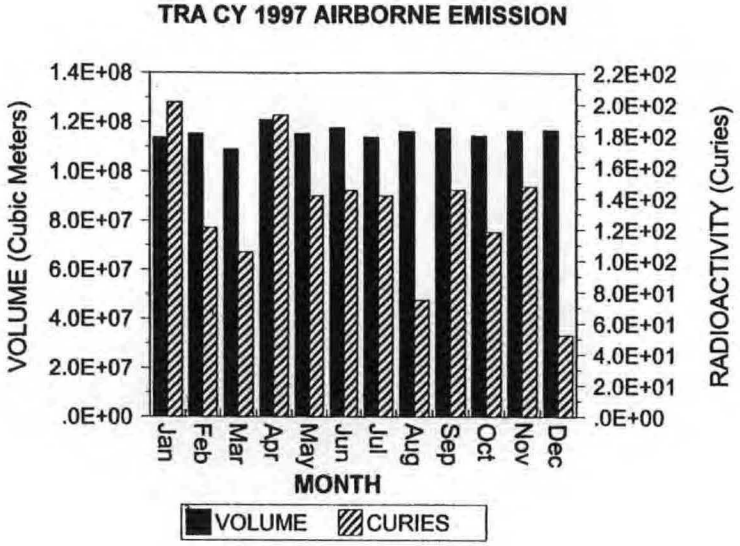


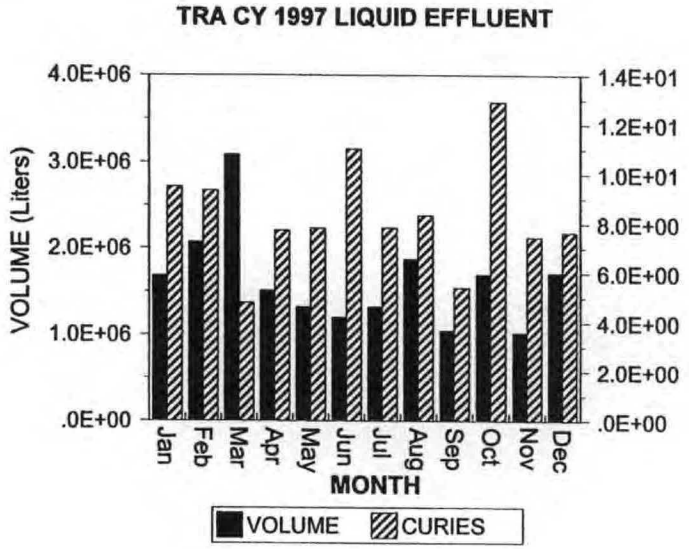


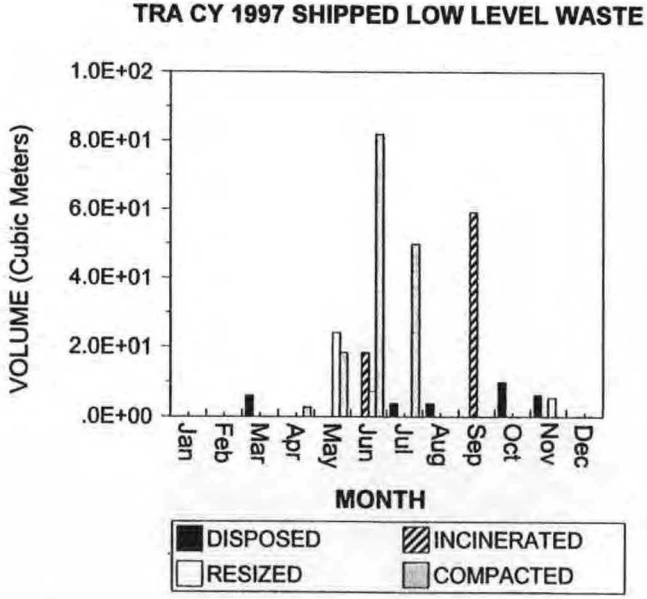
Graph: GAREATAN

Test Reactor Area 1997 Detail Graphs

TEST REACTOR AREA (TRA) MONTHLY DETAILS
CY- 1997





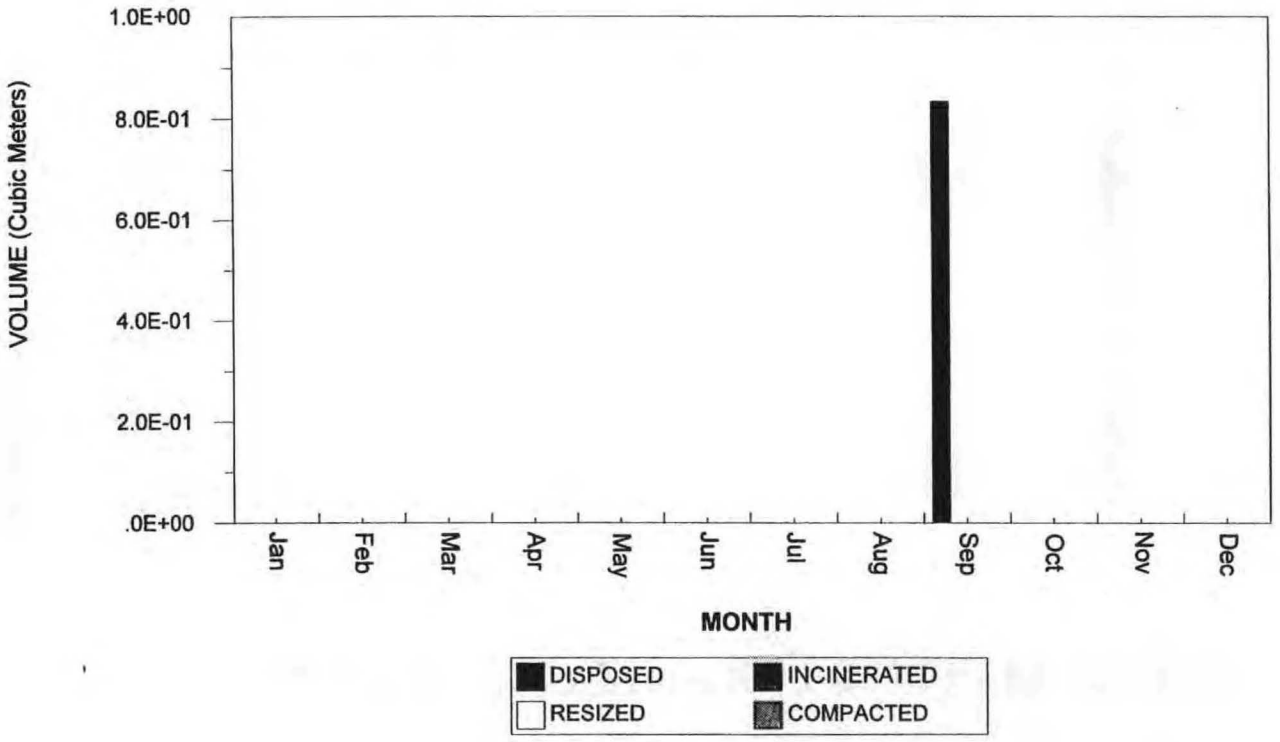


Graph: GAREATRA

Waste Area Groups 1997 Detail Graphs

WAG1 AREA MONTHLY DETAILS
CY-1997

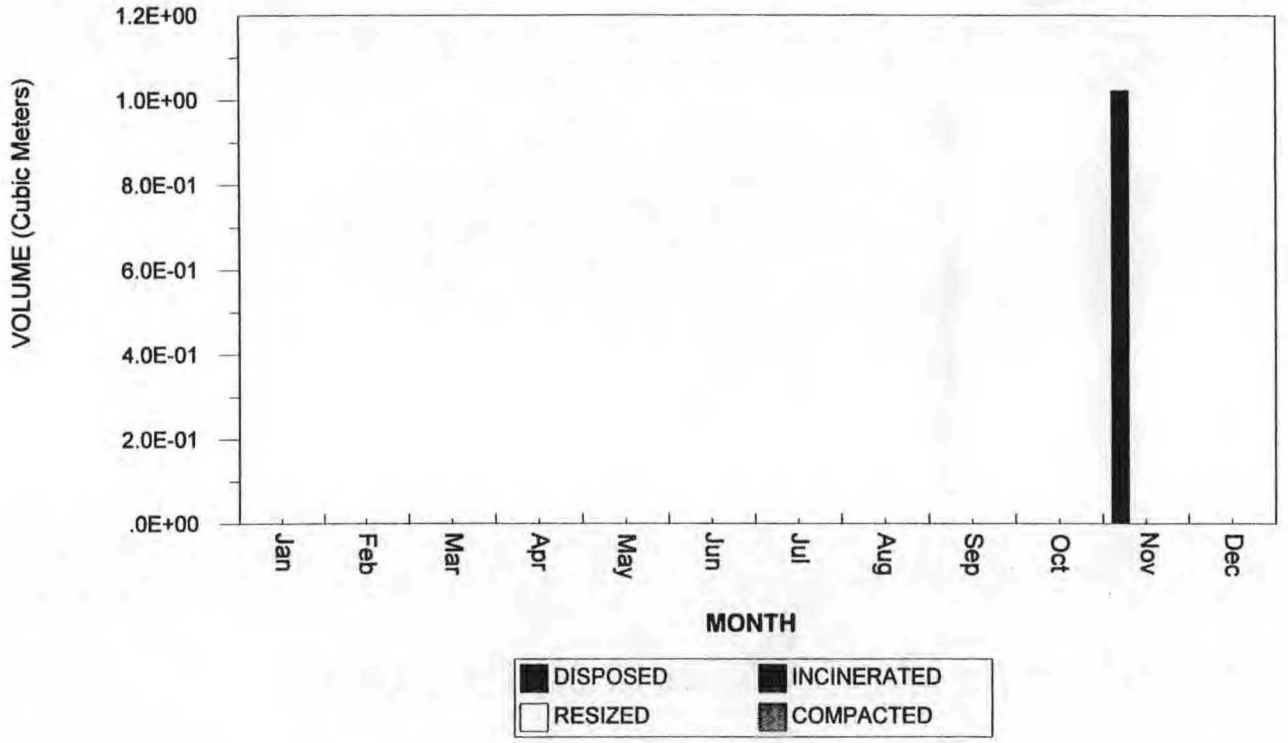
WAG1 CY 1997 SHIPPED LOW LEVEL WASTE



Graph: GAREWAG1

WAG3 AREA MONTHLY DETAILS
CY-1997

WAG3 CY 1997 SHIPPED LOW LEVEL WASTE

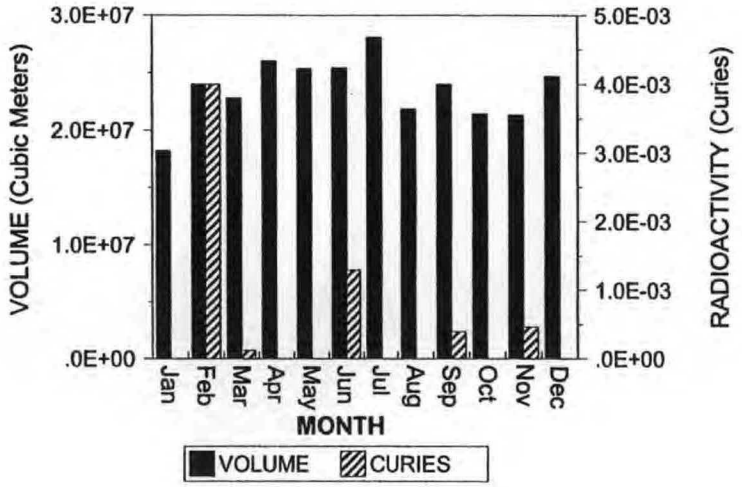


Graph: GAREWAG3

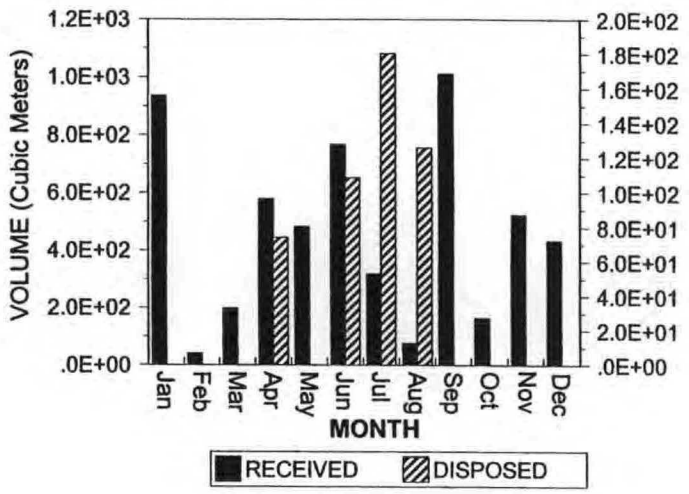
Waste Experimental Reduction Facility 1997 Detail Graphs

WASTE EXPERIMENTAL REDUCTION FACILITY (WERF) MONTHLY DETAILS
CY- 1997

WERF CY 1997 AIRBORNE EMISSION



WERF CY 1997 RECEIVED/DISPOSED CONTAINERIZED WASTE

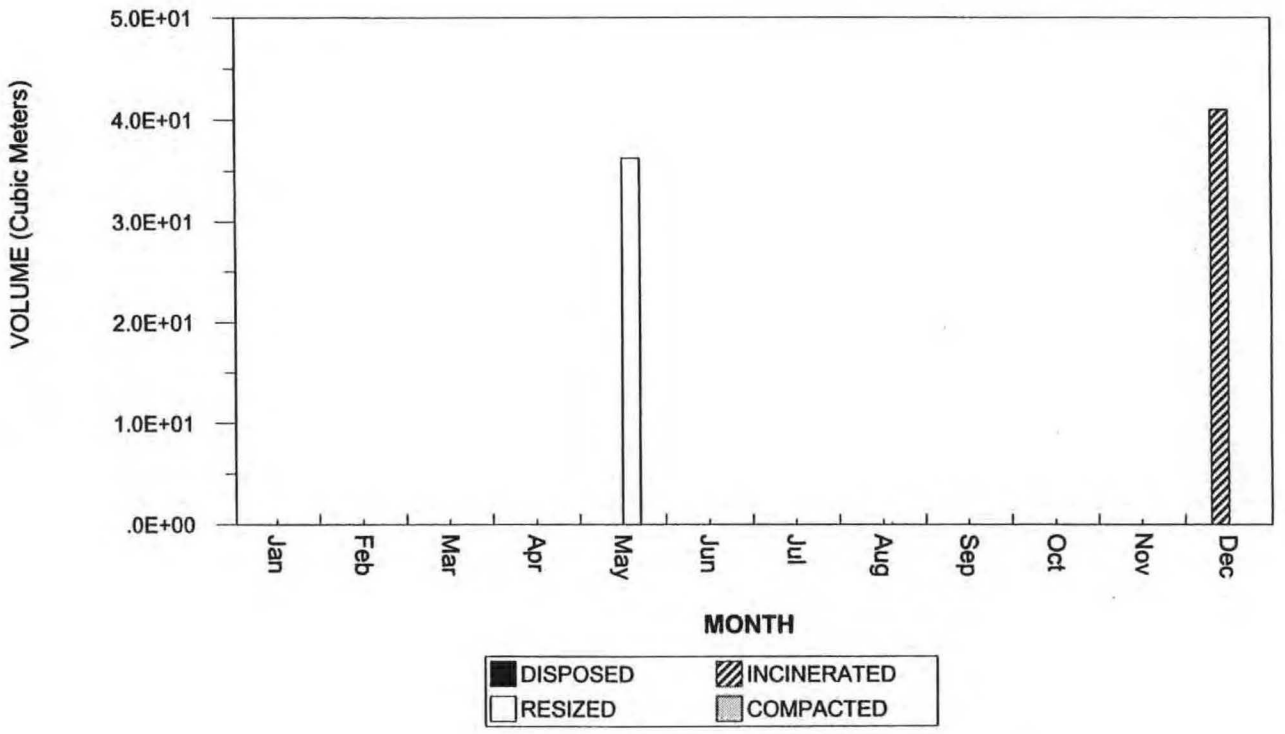


Graph: GAREAWER

Waste Management Facility 1997 Detail Graphs

WASTE MANAGEMENT COMPLEX (WMF) MONTHLY DETAILS
CY-1997

WMF CY 1997 SHIPPED LOW LEVEL WASTE

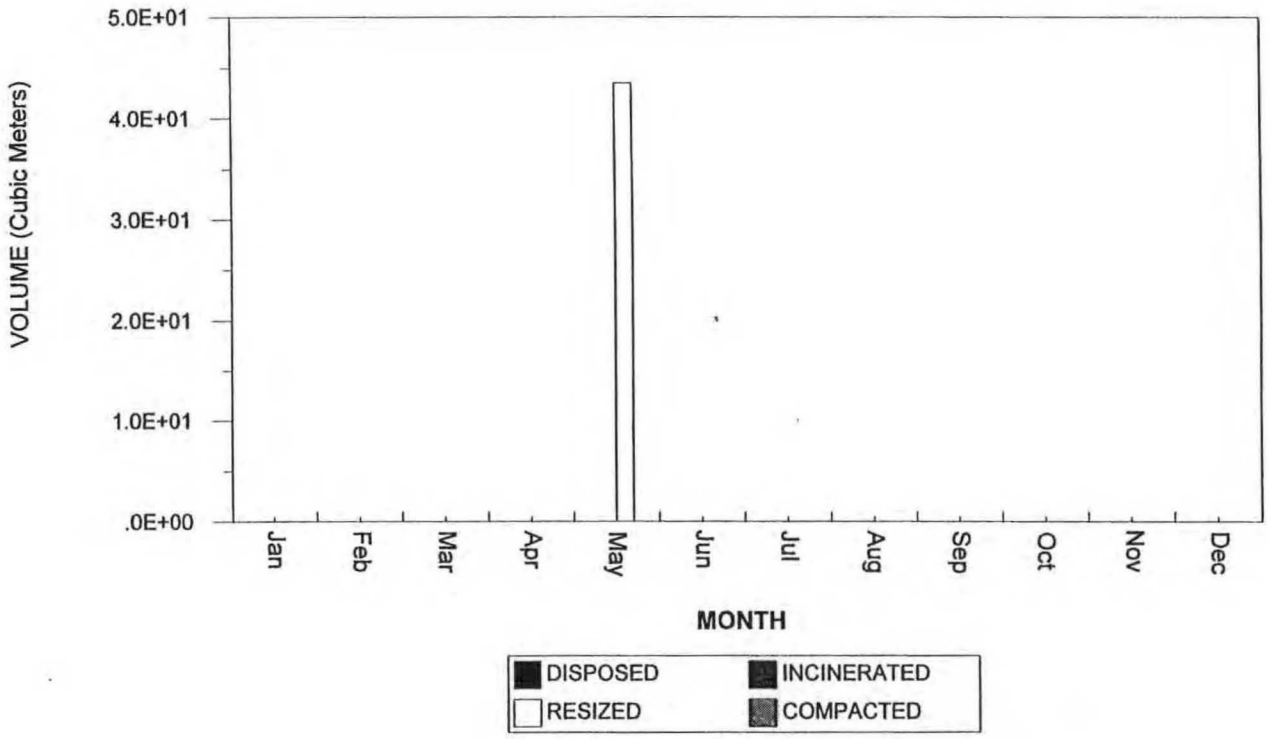


Graph: GAREAWMC

Waste Reduction Operations Complex

WROC AREA MONTHLY DETAILS
CY-1997

WROC CY 1997 SHIPPED LOW LEVEL WASTE



Graph: GAREWROC

Engineered Release Points

Table 1. Engineered release points to the environment.

Type of Discharge	Area/Location	Type of Description of Discharge Surface	Air Emission Inventory Stack No.	Active (Yes/No)
Airborne	ANL/EBR-II, FCF	61-m glass-coated steel stack, 30 m^3/s discharge capacity, continuously monitored.	ANL-764-001	Yes
	ANL/FASB	10-m stack, 6.64 m^3/s discharge capacity, continuously monitored.	ANL-787-001	Yes
	ANL/FMF	11.1-m stack, 4.6 m^3/s discharge capacity, continuously monitored.	ANL-704-008	Yes
	ANL/HFEF	28.6-m stack, 21.7 m^3/s discharge capacity, continuously monitored.	ANL-785-018	Yes
	ANL/L&O	Two separate stacks□one stack is 15.2 m with 10.9 m^3/s discharge capacity. The other stack is 11.3 m with 7.8 m^3/s discharge capacity. Both stacks are continuously monitored.	ANL-752-004 (MAIN) ANL-752-005 (NDA)	Yes
	ANL/RLWTF	14.2-m stack, 1.7 m^3/s discharge capacity, continuously monitored.	ANL-798-017	Yes
	ANL/SCMS	14.6-m stack, 4.7 m^3/s discharge capacity, continuously monitored.	ANL-793-001	Yes
	ANL/SPF	6.9-m stack, 2.1 m^3/s discharge capacity, continuously monitored. This stack is presently inactive.	ANL-799-010	No
	ANL/TREAT	42.7-m steel stack, 2.8 m^3/s discharge capacity, continuously monitored.	ANL-720-007	Yes
	ANL/ZPPR	22.9-m steel stack, 2.3 m^3/s discharge capacity, continuously monitored.	ANL-777-002	Yes
	ARA	9.1-m stack, 1.4 m^3/s discharge capacity, continuously monitored. These stacks were capped in 1989. D&D removal scheduled for 1996.	ARA001	No
	CFA/West	Two normal ventilation exhausts, respirator maintenance 0.6 m^3/s flow, sampled weekly when operating. Facility placed on standby June 1, 1993.	Drying ovens CFA-617-030 CFA-617-031	No
	CFA/North	Normal ventilation exhausts, laundry dryer, 6.1 m^3/s flow, continuously sampled when operating.	CFA-617-010 CFA-617-011	No
	CPP/FAST	50-m stack, 66.1 m^3/s discharge capacity, continuously monitored and sampled for particulates only.	CPP-767-001	Yes
	CPP/Main Stack	76.2-m stack, 84.95 m^3/s discharge capacity, continuously monitored.	CPP-708-001	Yes
	CPP/NWCF	22-m stack, 51.9 m^3/s discharge capacity, continuously monitored and sampled.	CPP-659-033	Yes
	CPP/RAL Stack	14.8-m stack, 8.5 m^3/s discharge capacity, continuously monitored and sampled.	CPP-684-001	Yes

Table 1. (continued)

Type of Discharge	Area/Location	Type of Description of Discharge Surface	Air Emission Inventory Stack No.	Active (Yes/No)
	CTF (formerly LOF)	45.72-m stack, 7.8 m^3/s discharge capacity, continuously monitored. This facility is not functioning and has no future plans to change status.	TAN-725-001	No
	NRF/A1W	13.7-m stack, continuous monitoring when operated during rad work	NRF-617-002	Yes
		13.7-m stack, .47 m^3/s discharge capacity, continuously monitored.	NRF-617-013	Yes
		13.7-m stack, 4.7 m^3/s A-RC 4.7 m^3/s, B-RC; these two share a stack, continuously monitored while operating.	NRF-617-020 NRF-617-021	Yes Yes
		12.2-m stack, 8.9 m^3/s discharge capacity, continuously monitored while operating.	NRF-616-012	Yes
		9.14-m stack, 39.6 m^3/s ELT, infrequent operation.	NRF-616-039	Yes
		17.1-m stack, 17.1 m^3/s emergency RC, infrequent operation.	NRF-616A-002	Yes
		Multiple vent points treated as one source. Continuous ambient monitoring. Ventilation rate based on fugitive turnover from blowers on temporary containment systems	NRF-616-PCMA	Yes
	NRF/A1W-RWDS	6.7-m stack, 283 m^3/s RWDE, infrequent operation.	NRF-628-006	Yes
	NRF/ECF	18 High bay roof vents, 20.4-m vents, 13900 m^3/s continuously monitored. In Oracl all vents mapped as	NRF-618-024 through NRF-618-029 NRF-618-032 through NRF-618-043 NRF-618-HBRV	Yes
		31.1-m stack, 23 m^3/s; Stack 1 continuously monitored.	NRF-618-099	Yes
		18-m stack, 12 m^3/s; Stack 2 continuously monitored.	NRF-618-103	Yes
	NRF/S1W	45-m stack, 2.85 m^3/s, fan room	NRF-601-019C	Yes
		1.3 m^3/s Chem stack shares the stack but continuously monitored separately.	NRF-601-019A	Yes
		16-m stack, 1 m^3/s RC exhaust; infrequent operation, monitored while operating.	NRF-601-023	Yes
		6 High bay roof vents, no active radiological work, building breathing rates without any operating fans. Multiple vents combined as single source	NRF-601-HBRV	Yes
	NRF/S5G	26-m stack, 12.5 m^3/s RAVE; continuously operating, continuously monitored.	NRF-633A-057	Yes

Table 1. (continued)

Type of Discharge	Area/Location	Type of Description of Discharge Surface	Air Emission Inventory Stack No.	Active (Yes/No)
		6 High bay rood vents treated as one source. Continuous ambient monitoring. Building breathing rate without any operating fans.	NRF-633-HBRV	Yes
	NRF/MSC	Miscellaneous and fugitive sources, ground level.	NRF-MSC-MSC	Yes
	PBF	24.4-m stack, 2.8 m^3/s discharge capacity, continuously monitored.	PER 620-016	Yes
	SMC/R&D Process	17.7-m stack, 23.6 m^3/s discharge capacity, continuously monitored.	TAN-607-039	Yes
	SMC/MDF QC LAB	17.99-m stack, 7.79 m^3/s discharge capacity, continuously monitored.	TAN-607-119	Yes
	SMC/LINE 2a	14.4-m stack, 18.12 m^3/s discharge capacity, continuously monitored.	TAN-629-013	Yes
	SMC/LINE 2b	8.36-m stack, 3.12 m^3/s discharge capacity, continuously monitored.	TAN-629-014	Yes
	SMC/LINE 2B	8.36-m stack, 3.12 m^3/s discharge capacity, continuously monitored.	TAN-629-012	Yes
	SMC Process S6	16.97-m stack, 7.08 m^3/s discharge capacity, continuously monitored.	TAN-679-027	Yes
	SMC Process S7	16.97-m stack, 7.08 m^3/s discharge capacity, continuously monitored.	TAN-679-026	Yes
	SMC Process S8	16.97-m stack, 7.08 m^3/s discharge capacity, continuously monitored.	TAN-679-025	Yes
	SMC Process S9	16.97-m stack, 7.08 m^3/s discharge capacity, continuously monitored.	TAN-679-024	Yes
	SMC Process S10	16.97-m stack, 7.08 m^3/s discharge capacity, continuously monitored.	TAN-679-023	Yes
	SMC Process S11	16.97-m stack, 7.08 m^3/s discharge capacity, continuously monitored.	TAN-679-022	Yes
	SMC/Scrap Handling	16.97-m stack, 7.93 m^3/s discharge capacity, continuously monitored.	TAN-679-020	Yes
	SMC/Liquid Reclaim	16.97-m stack, 7.93 m^3/s discharge capacity, continuously monitored.	TAN-679-018	Yes
	SMC/PRF Stack S14	33.54-m stack, 0.94 m^3/s discharge capacity, continuously monitored.	TAN-679-016	Yes
	TAN Decon	29.6-m stack, 24.9 m^3/s discharge capacity, continuously monitored currently no emissions. Currently in process of deactivation.	TAN-607-136	No
	TAN/TSF	51.4-m stack, 7.9 m^3/s discharge capacity, continuously monitored.	TAN-734-001	Yes
	TAN/PREPP	26.1-m stack, 3 m^3/s discharge capacity, continuously monitored. Facility was never	TAN-607-107	No

Table 1. (continued)

Type of Discharge	Area/Location	Type of Description of Discharge Surface	Air Emission Inventory Stack No.	Active (Yes/No)
		activated currently being scheduled for decommissioning.		
	TRA/ATR	76.2-m stack, 21.2 m^3/s discharge capacity, continuously monitored.	TRA-770-001	Yes
	TRA/Chem Lab	29.6-m stack, 6.6 m^3/s discharge capacity, continuously monitored.	TRA-604-035	Yes
	TRA/ETR	76.2-m stack, 9.4 m^3/s discharge capacity, continuously monitored. As of March 1988, this stack is not monitored. No activity is discharged.	TRA-753-001	Yes
	TRA/Hot Cells	15.2-m stack, 1.6 m^3/s discharge capacity, continuously monitored. Three stacks sampled as one.	TRA-632-030	Yes
	TRA/MTR	76.2-m stack, 6 m^3/s discharge capacity, continuously monitored.	TRA-710-001	Yes
	TRA/661	8.43-m stack, 3.3 m^3/s discharge capacity, not monitored.	TRA-661-008	Yes
	WER/North	15-m stack, 8 m^3/s discharge capacity, continuously monitored.	PER-755-001	Yes
	WER/South	15-m stack, 9.4 m^3/s discharge capacity, continuously monitored.	PER-756-001	Yes
	WER/765	15.5-m stack, 4.7 m^3/s discharge capacity, continuously monitored.	PER-765-001	Yes
	WMC/SWEPP	4.5-m stack, 1.7 m^3/s discharge capacity, continuously monitored during active Drum Vent operation.	WMF-615-001	Yes
Liquid (injection well)	CPP	181 m deep (42.7 m below water table), constantly monitored by radiation detector with a detection unit of 2×10^{-6} Ci/mL, flow approximately 170×10^6 liters per month. (INEL discharges to the injection well have been terminated since 1986. This well was closed in November 1989.)		No
	PBF	33.5 m deep (105 m above water table), constantly monitored, flow intermittent with a maximum of 750 liters per minute (no longer in use as of August 1980; in June 1984, this well was completely filled with concrete).		No
Liquid (seepage ponds, leaching pits, cribs)	ANL/EBR-II and L&O	Batch monitored pond approximately 1.2×10^4 m^2 maximum depth of 4 m.		Yes
	ARA	Surface depression (approximately 1.3 acre), estimate flow 1.05×10^7 liters per year, continuously monitored. ARA completely shut down operations in September 1986, no further		No

Table 1. (continued)

Type of Discharge	Area/Location	Type of Description of Discharge Surface	Air Emission Inventory Stack No.	Active (Yes/No)
		releases are being made to this release point except for drainage as a result of rain water runoff.		
	CFA	Sewage plant tile drain field, 610 x 61 m, average flow approximately 15 x 10^6 liters per month, continuously monitored.		Yes
	CPP/Pond No. 1	Percolation pond, 412 ft x 480 ft x 16 ft. CPP 797 is the discharge point that is continuously monitored and sampled.		Yes
	CPP/Pond No. 2	Percolation pond, 498 ft x 498 ft x 12 to 14 ft. CPP 797 is the discharge point that is continuously monitored and sampled.		Yes
	CTF (formerly LOF)	Continuously monitored pond approximately 76 x 152 x maximum 5.5 m deep.		Yes
	NRF	Continuously monitored leaching beds handling 95,000 liters per month (releases ended April 1979).		No
	TAN	Continuously monitored pond approximately 13 hectares in size.	N/A	Yes
	TRA	Two ponds 40 x 73 and one pond 76 x 122 m, average flow approximately 90 x 10^6 liters per month, prior to 1988. In 1988, average flow decreased to 4.7 x 10^6 liters per month. Ponds are continuously monitored. Removed from service August 1993.	N/A	No
	TRA	Evaporation pond. Two adjacent lined ponds measuring 70 m x 140 m each. Double liner and leak detection system. All particulate activity remains in lined pond 3 x 10^6 liters per month. Continuously monitored. Zero release to soil column.		Yes
Solid	All facilities	Disposal of radioactive solid waste accomplished at the INEL Radioactive Waste Management Complex (RWMC).	N/A	Yes
		Storage of transuranic radioactive solid waste accomplished at the INEL RWMC.	N/A	Yes
		Reduction of applicable radioactive solid waste volume accomplished at the INEL WERF.	N/A	Yes
		Storage of calcinated solids accomplished at CPP.	N/A	Yes
		Storage of sodium-contaminated waste generated by ANL accomplished at ANL.	N/A	Yes
		Storage of mixed waste accomplished at Mixed Waste Storage Facility (MWSF).	N/A	Yes